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Revisiting Eden

The Olmsted Brothers' ecological plans for Los Angeles, 1914-1931

Christine Edstrom O'Hara

This thesis is submitted to the University of Edinburgh in accordance with the requirements of the degree of Doctor of Philosophy in the College of Humanities and Social Science. January 2018.

SIGNED DECLARATION

I declare that this thesis has been composed by me and that the work contained within it is my own. I also declare that this work has not been submitted for any other degree or professional qualification. While this thesis was under research, two articles were published and noted as follows:

O'Hara, Christine Edstrom. "Early Sustainable Planning in Palos Verdes." *Palos Verdes Bulletin* Fall 2016: 1-2. Print.

O'Hara, Christine Edstrom. "A Radical Vision for Palos Verdes Estates: Early Sustainable Planning on the West Coast." *Eden: Journal of the California Garden & Landscape History Society* 19, no. 2 (Spring 2016): 3-7. Print.

Prior to undertaking this thesis, there was one other related publication, though I have drawn only minimally from it in Chapter 4:

O'Hara, Christine Edstrom. "The Panama-California Exposition, San Diego, 1915: the Olmsted Brothers' Ecological Park Typology." *The Journal for the Society of Architectural Historians* 7, no. 1 (March 2011): 64-81. © 2011 by the Society of Architectural Historians. Published by The University of California Press.

Formal permission to publish was given by all three journals. Please see Appendix 2.



Christine Edstrom O'Hara

January 2018

ABSTRACT

Ecological planning relies on a keen awareness of relationships between biophysical and social processes, then uses this knowledge for decision making in accommodating for human needs. The value of this planning process allows for design intervention while also ensuring a sustained use of the landscape, with these insights blending skill and artistry into place-making. In the 1960s, environmental concerns galvanized a generation of landscape architects who first codified ecological planning as a rationale for decisions with environmental stewardship. While this is the accepted canon, in the early 20th century during a period of experimentation and exploration, the Olmsted Brothers landscape architecture firm was using ecological principles as foundations for landscape architecture practice. This thesis challenges current discourse and accepted history, presenting evidence that the Olmsted Brothers' work in the 1920s predated many modern ecological theories and applications, and is an important addition to the historiography of ecological planning. This thesis largely focuses on Frederick Law Olmsted, Jr. as the central historical figure, offering a more in-depth understanding of the evolution of the firm, and fills the gap of the Olmsted legacy. As the children of Frederick Law Olmsted, Sr., Frederick Law Olmsted, Jr. (1870 – 1957) along with his brother John Charles Olmsted (1852 – 1920) co-founded the Olmsted Brothers and created one of the most prolific landscape architecture practices, developing projects in all aspects of landscape design. The Olmsted Brothers' work in California accounts for over 200 projects, and ranks among the highest number of their 5000 designs developed in the United States. In the early 20th century, the city of Los Angeles offered significant ecological, cultural, and technological challenges for the firm, with the city's unbridled urbanization and proliferate use of water and automobility. Rich in solutions, the firm's built and proposed designs over the course of 20 years revealed the discipline of landscape architecture in its richest and most scalar form. From small scale gardens, residential communities, park and parkway systems, to open space and watershed planning, the Olmsted Brothers created public spaces that worked in relationship to the ecology of the region during a critical juncture in the history of regional planning in Southern California.

A range of methods were utilized in this thesis. Primary data provided both qualitative and quantitative material for study and was extracted from letters, reports and writing, drawings, photos, plans and maps. Over 20,000 primary documents, written by the firm's principals, provided the basis for analysis, and in a new way, this thesis interprets not

only the written documents, but related construction documents developed from 1914 - 1931. As part of its data collection, an original contribution of this study is a comprehensive corpus of Olmsted Brothers source material from their work in Los Angeles. Methodologies sought to modify these documents into a spatial understanding of their work through digital analysis and re-creation of designs.

The Olmsted Brothers' design solutions provide insights into today's ongoing concerns about water management, sustainable urban planning, and multifunctional landscapes. Their design proposals solved multiple problems *with* the design, accounting for not only vast geography, but complex cultural and natural systems within it. The value of their ideas reflects landscape architecture solutions as hybrid, dynamic, and strategic, offering 21st century practitioners paradigms in an ever-changing ecology.

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PREFACE

My initial interest in the Olmsted Brothers began during research for a master of landscape architecture at University of Washington in 2000. Then-advisor Professor David Streatfield suggested this topic of study due to the dearth of research on this firm, especially given their influence and breadth of work. Later in 2008, I became a board member for the National Association for Olmsted Parks and realized the impact of this firm on a national level. Without knowing it, I had in fact lived in Olmsted Brothers' landscapes in Denver, Portland, Seattle, Torrance, and Palos Verdes, and began to recognize their distinctive style with an overlay of regionalism. Though I would have to wait until 2014, my intention was always to return to an in-depth study of the Olmsted Brothers, focused on their regional application to design in California, a state where I have lived for over 30 years. Over the past three years, the research has been tightly focused on a new area of discovery, that of their rich ecological understanding of place and the firm's design response as landscape architects. In hindsight, I realized that my previous research on the firm had focused on a cultural study versus this current work of deeply examining the construction documents and correspondence over 30 years for the thesis' case studies.

My review of this firm's work is through a lens of a practicing landscape architect, where my work has included both historic restoration and contemporary design with a focus on sustainability. As a landscape historian, I view history and modern design as companion ideas where history provides the framework for informing the direction of the field of landscape architecture. This duality, for me, has provided a new appreciation of historic documents as they relate to modern landscape architecture practices.

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CHAPTER 1

INTRODUCTION

When the seas are running high, as they so often do at Point Lobos, the huge waves, with their heaving burst and drag, grip the attention and rouse the emotions. This spectacular impact upon shore forms of extraordinary variety stirs the mind to some appreciation of the vast power and dramatic quality of the forces here at work...

Ecologically, The Pass is one of the most remarkable spots in the Reserve; for here in a small area are tremendous differences in exposure to sun, to wind, and to sea fog, and in soil depth and runoff, so that here are to be found many species in constant competition.¹

Frederick Law Olmsted, Jr., "A Landscape of Beauty and Meaning," 1954

At age 84, Frederick Law Olmsted, Jr. (1870 - 1957) poetically wrote about the beauty of Point Lobos Reserve along California's scenic northern coast and the site's preservation as a state park is part of his legacy in California. As one of the most important American landscape architects of the 20th century, Frederick Law Olmsted, Jr. understood the balance of landscape scenery with ecological planning to preserve places of powerful beauty and dramatic quality. He wrote of the ecological relationships between coastal vegetation and tidal areas and their impact by natural processes of waves, currents, wind and spray. Amidst these actions was constant competition between species of all types including plants, animals, and ultimately humans, which formed the basis of his design

¹Frederick Law Olmsted, Jr., "Landscape of Beauty and Meaning," *Point Lobos Reserve: State Park, California* (1954): 19, 29.

principles. In a discipline that is necessarily interventionist, his designs were guided by ecological principles, allowing him to design spaces for people to use and enjoy while striving to preserve the intrinsic beauty and splendor of the original setting. As co-founder of Olmsted Brothers, Landscape Architects, Frederick Law Olmsted, Jr., along with his brother John Charles Olmsted (1852 - 1920), created one of the most prolific landscape architecture practices, developing projects in all aspects of landscape design from small gardens to watershed plans.

The Olmsted brothers were the children of one of America's best known landscape architects, Frederick Law Olmsted, Sr., whose own practice thrived through the mid to late 19th century. The Olmsted firm went through numerous name changes as partnerships shifted, with significant influence from Charles Eliot who brought a greater focus on science to the firm's design approach.² After Frederick Law Olmsted, Sr.'s retirement in 1895 and Charles Eliot's untimely death in 1897, in 1898 Frederick Law Olmsted, Jr. joined the firm changing the name to the Olmsted Brothers. Collectively, the Olmsted legacy in American landscape design extended over 100 years, from 1855 – 1961, amassing plans for over 6,000 projects across the United States, Canada, Argentina, Bermuda, and Puerto Rico.³ Though this extended period witnessed significant cultural, political, and technological change, the firm maintained consistent design approaches established by Frederick Law Olmsted, Sr. These design principles connected people to nature within the city, responded to the natural conditions of the site, and when possible, effected environmental restoration through the design. Adding to his father's values of bringing nature to the city, Olmsted, Jr. sought to bring people to nature to share his experience of deep wonder. While Olmsted, Sr. believed social justice was bringing green spaces to cities for the urban poor, for Olmsted, Jr. social justice meant providing *access* for all, both rich and poor, to green spaces both in and outside of cities.

From Olmsted, Sr. to Olmsted, Jr., landscape architecture practice greatly evolved in terms of scale of projects, approach to open space, and new urban design models. The 20th century's significant cultural and technological changes were accompanied by new ideas about nature and planning. For Olmsted, Jr., his work matured in the early 20th

² Under Frederick Law Olmsted, Sr., the Olmsted firm names included Olmsted, Vaux & Co., to the inclusion of stepson John Charles in F.L. and J.C. Olmsted, replaced by F.L. Olmsted & Co., and finally Olmsted, Olmsted & Eliot.

³ After Frederick Law Olmsted, Jr.'s death in 1920, the firm would continue until 1979 as the Olmsted Associates. See Postscript for further details.

century, a period of new technological context, which required a change in the conception and intervention of design. In a further extension of bringing nature to the city, the Garden City movement offered the Olmsted Brothers a model for bringing natural areas to residential subdivision designs which would link by rail country living and city employment such as a Forest Hills Gardens in New York. An initial central park in the 19th century became greater regional park systems by the 20th century as well as moves from a single estate design to large-scale community planning. The proliferation of automobiles effectively changed transportation planning with paradigms of Olmsted, Sr.'s linear parks becoming vegetated, circulatory parkways for cars. Parkway were absorbed into a larger greenways movement that fit neatly into the cultural expectations of adding natural spaces within the city.

In an expansion of American approaches for the discipline, Olmsted, Sr. helped develop open space management plans such as in Yosemite and in the forests at the Biltmore Estate, moving the practice of landscape architecture beyond the garden walls. Yosemite's land management recommendations were a prescient approach to open space and this visionary model was supported later by the preservation philosophies in the Conservation Movement which instituted a broad and public concern for natural resource management. A pragmatist, Olmsted, Jr. was also committed to preservation as seen in his influence on establishment of the National Park Service, ensuring that pristine landscapes be maintained in perpetuity for public use. At the same time, he tempered conservation approaches in certain instances to careful natural resource management. Roadways, for example, were advocated through open space for public access and recreation, but their placement would need to minimize grading and scarring on the land.

The first three decades of the 20th century were especially productive for the Olmsted Brothers. In fact, while the firm's chief office was located outside of Boston, in Brookline, Massachusetts, in October 1922, the Olmsted Brothers opened their first West Coast office in Redondo Beach, California. By 1923, under terms required by developer Frank Vanderlip at nearby Palos Verdes, principals Frederick Law Olmsted, Jr. and James Frederick Dawson were required to live in the community while it was under design and construction. Living in Los Angeles County was a unique arrangement for the firm's principals who had never before been permanent residents of their own project. As it turns out, long-term residence through the 1920s would enhance Frederick Law Olmsted, Jr.'s

understanding of Southern California's regional ecology, culture, and politics, knowledge that would have great importance for other major projects in the decades to come.

Though the Olmsted firm had significant experience working on the East Coast and Midwest, designing in California was challenging as the firm had to accommodate unfamiliar ecological conditions. The region's semi-arid Mediterranean ecology, with inundating winter rains and rainless summers, along with periods of alternating drought and heavy flooding, also included a geologic puzzle of subterranean rivers in Los Angeles which only occasionally surfaced. Unlike many American cities which had year-round precipitation, water was the major ecological issue for Southern California with 15 inches of average rainfall. These conditions would require the firm to develop new models in landscape design, untested elsewhere in the United States. Developing these careful interventions of "appropriate design" in response to the regional ecology of Los Angeles, the Olmsted Brothers ultimately advised or developed designs for 77 projects in Los Angeles County between 1903 and 1935 which makes this particular region a rich opportunity for analysis.

In addition to new ecological conditions, Los Angeles had cultural challenges. In the 1920s, this city was the fastest growing urban community in America. Despite this huge population influx, Los Angeles was being built without a comprehensive master plan for growth. Urban sprawl and the disconnect of new communities from established roadways was commonplace. Lacking an understanding of the seasonal rivers, homes were built in the floodplains which to unsuspecting builders appeared to be dry. Technology was also a significant factor, with Los Angeles having the largest per capita ownership of automobiles. This dynamic required new landscape types in a shift away from public transit. The spirit of the 1920s inspired a willingness for designers and engineers to experiment with new urban models in city, regional, and transportation planning in a landscape with little existing infrastructure.

FRAMING THE RESEARCH

While there exists a wide body of literature on Frederick Law Olmsted, Sr., the continuation of the firm post-Olmsted, Sr. is significantly under-analyzed despite the volume of primary archival resources that remain from the firm's practice, namely the plans, letters, photos, and drawings. Given the Olmsted Brothers' significant place in

history, this study largely focuses on Frederick Law Olmsted, Jr. as the central historical figure, the firm's leader through the 1920s, and fills the gap in the historiography of ecological planning and testing of methods in design during the early 20th century. The omission of Olmsted, Jr. in significant study is surprising given his stature and influence on American landscape architecture, but perhaps is a result of his cling to 19th century aesthetic values. In explanation, the 1940s could be considered the pinnacle period of American landscape architecture practice during President Franklin Delano Roosevelt's New Deal enterprises. Under the agencies of the Works Progress Administration, Civilian Conservation Corps, Resettlement Administration, and Farm Security Administration, construction of roads through forests, recreational areas, parks, playgrounds, and new towns, required the unique training of landscape architects who understood the relationship of ecological conditions and new development.

But this evolution in landscape architecture practice was short-lived. By the late 1940s, and through the influence of landscape architects Garrett Eckbo, Dan Kiley, and James Rose among others, the discipline moved to "design as art" and largely abandoned the previous focus on landscape ecology as the driver for form response. Modernism had progressed in architecture, but for many landscape architects, their discipline was criticized as remaining in an historicist Olmstedian aesthetic. Modernity, therefore, meant a rejection of numerous approaches established by the Olmsted firm. Many landscape architects during this period in American history willfully ignored ecological response, with aesthetics, politics, and economics the driver for design. Many of Frederick Law Olmsted, Jr.'s innovations would only be reconsidered in the late 20th century when ecological considerations were once again at the forefront of design.

The canon for American ecological planning contends that this planning approach largely began in the 1960s, especially through the work of landscape architects Ian McHarg, Stanley White, Hideo Sasaki, and Philip Lewis, as designers recognized the requirement for understanding ecological relationships prior to intervention in the landscape. While McHarg gives credit to Olmsted partner Charles Eliot for his 19th century mapping overlay system to analyze landscapes and later would adapt Eliot's methods to influence GIS modeling, what is largely unrecognized is that many of the 1960s ideas and methodologies for designing within natural systems were tested and tried at least forty years prior to this period. During the 1920s, the Olmsted firm never spoke of "ecological planning" as the words were not in common usage until the 1930s when "ecosystem" was first coined. Yet a critical analysis of

the Olmsted Brothers' work through their personal narratives found in the job correspondence and examination of construction documents reveals that the firm was in fact practicing an early form of ecological planning. This thesis seeks to demonstrate that ecological planning actually began in earnest by prescient designers in the Olmsted Brothers landscape architecture firm, well before the modern codification of ecological planning. The Olmsted firm's sophisticated research of natural systems and design of hybridized landscape types were forerunners to Ian McHarg's landscape suitability analysis, Frederick Steiner's late 1990s ecological inventory, and many tenets of 21st century theories such as landscape urbanism.

In order to discern the broad context and regional understanding of Los Angeles County as understood by the Olmsted Brothers, this argument is explored through four case studies which present large themes of inquiry: planned community design, infrastructure design, open space planning, and watershed management. These project types provide a breadth of examples, at a range of scales, and continue to be representative of relevant developments in modern landscape architecture practice.

Planned communities, those which must blend the function and siting of roads, residential neighborhoods, commercial districts, and recreational amenities, more recently have been designed as rigid geometric diagrams by many urban planners, often without the ecological elements of the site being the driver for form. A site's ecological constructs provided a framework for design by the Olmsted firm as they worked in cooperation with natural systems. Instead of rigid geometry, their forms aligned with existing topography and hydrological patterns.

Infrastructure design, such as parkways, relied on models of single use—that of a roadway for vehicles—through most of the 20th century. However, the Olmsted Brothers saw these landscape types as having function beyond simply a roadway, such as stormwater management. Hybridized function, the firm argued, would offer multi-use solutions and importantly, multiple options to fund construction.

During the late 20th century, open space and watersheds have been recognized for their profound range of services and must be carefully planned to accommodate an array of needs. The strategic setting aside of open space included in recommendations by Frederick Law Olmsted, Jr. during the 1920s recognized that the value and particular design of open space extended to protecting the watershed, reducing fire hazards, and promoting recreational use, all without disrupting the ecological function of the landscape. Watershed

management today continues to be a critical aspect of ecological planning in working with hydrological systems, especially those in urban settings. Inherent in the definition of ecological planning is an understanding that natural systems must accommodate human needs such that this process relies on biophysical research for optimum land use. In the 1920s and still today, Los Angeles has all these vital needs: community planning, infrastructure building, open space and watershed management, and designers must remain responsive to these ecological challenges and continued urbanization.

This study's critical assessment of Olmsted Brothers' developments dissects individual firm projects to understand *the way* the firm practiced and tested ecological design in Los Angeles, prior to what would become a normative part of modern landscape architecture practice. In examining ecologically responsive designs, the research addresses how the Olmsted Brothers' work fit within ecological tenets, and was influenced by the political and cultural context of the 1920s. Relying on job correspondence, period imagery, plans, and maps, this evidence supports the hypothesis with insight into the intentions of designs in this period. Ultimately, this thesis provides an in-depth analysis of the practice of landscape architecture and development of cultural landscapes in an ecological framework. Its discourse points to the successes and failures in Los Angeles, and the continued value of the Olmsted plans for 21st century design.

CHAPTER 2

LITERATURE REVIEW

Los Angeles has long been associated with the romance of Eden, a place of idyllic paradise. The 19th century marketing of this imagined Los Angeles continued into the 20th century, up to the dystopian narrative *Ecology of Fear: Los Angeles and the Imagination of Disaster* by Mike Davis, when Los Angeles' true environmental conditions—drought, flood, earthquakes and fire—were laid bare. Nonetheless, Eden and Los Angeles remain forever coupled, including in landscape historian David Streatfield's seminal book *California Gardens: Creating a New Eden* as well as Greg Hise and William Deverell's *Eden by Design: the 1930 Olmsted-Bartholomew Plan for the Los Angeles Region*. This thesis seeks to add onto the work of Streatfield, Hise and Deverell, and perhaps oddly, Mike Davis, offering discourse on a landscape architecture firm's objective of creating of an Eden-like landscape within the context of the unique ecological challenges in Los Angeles.

In situating the firm's work between 1914 - 1931 in Los Angeles, research reviewed the cultural and ecological context of the city during that period and how that factored into design solutions. What were the influences on the Olmsted Brothers' values and approaches to landscape architecture design? How has Frederick Law Olmsted, Jr. and the Olmsted Brothers been situated in the literature and what was the Olmsted firm's legacy in ecological planning? To address these and other questions, the literature review examined the interrelationship of nature and culture in Los Angeles during the early 20th century and reviewed literature on the Olmsted Brothers, especially Frederick Law Olmsted, Jr., to develop a context for this study.

NATURE AND CULTURE IN EARLY 20TH CENTURY LOS ANGELES

With research concentrated on the Olmsted Brothers' projects in Los Angeles, an in-depth study was necessary to understand culture and ecology in the region during the 1920s. A critical aspect of this thesis explores landscape planning in Southern California where the firm would tackle central issues affecting urban design. These problems included community building and planning, especially with a population surge in the 1920s. The development of parkways by the firm also required a literature review of transportation history and the effects of automobility. Water was both a cultural and ecological focus with new design proposals needing to recognize public use of water, but also regional hydrology, especially of the rivers in Los Angeles. Ultimately, these fundamental urban concerns required the Olmsted Brothers to balance cultural and ecological needs of the period.

Community Building and Planning

Considered by many to be the definitive history of Los Angeles, Robert Fogelson's 1967 classic *The Fragmented Metropolis, Los Angeles, 1850-1939* used the metaphor of fragmentation to describe Los Angeles: politically, socially, and culturally. Urban historian Robert Fishman writes in the introduction that the tension of growth yet fragmentation in Los Angeles "required the intensive and highly effective use of public power, [yet] the metropolis that emerged was strangely bereft of any unifying civil life."¹ Fogelson's narrative expanded to all aspects of Los Angeles history from transportation, water and real estate, to the city's urban landscape in city and regional planning.

Los Angeles developed horizontally, spreading out across the flat, wide floodplains. Bounded only by the Pacific Ocean on the west and mountains on the north and east, the geography encouraged dispersal rather than centralization. Speculators relied on this pattern, subdividing property to sell to newcomers, with the community growing without a master plan. For this relatively new city, Fogelson wrote that the new residents often had few established ties, perhaps explaining why many Angelenos had little foresight—or interest—in the long-term development of the city.

As early as the 1890s, boosterism in marketing of the city's benign climate, spoke of the rainless summers and year-round summer-like weather. Events like the Rose Parade

¹ Robert M. Fogelson, *The Fragmented Metropolis, Los Angeles, 1850-1939* (Cambridge: Harvard University Press, 1967), xvii.

held in Pasadena on New Year's Day exemplified the celebration of warm weather when the rest of America was experiencing its coldest time of year. However, the seemingly benign climate was a bit of fantasy given the dangerous ecological patterns inherent in the region such as major flooding, wildfires, and earthquakes. Within *Ecology of Fear*, Mike Davis' chapter "How Eden lost its Garden" chronicles how Helen Hunt Jackson's 1884 fictional story *Ramona* idealized both the relationship between a Mexican ranchero woman and her San Gabrielino Indian lover as well as the picturesque California landscape she described. Hunt's depiction of a lush "Eden" was in actuality a very dry, semi-arid landscape. Davis points out that while Los Angeles spent much on marketing the climate, the city "spent little on preserving and enhancing it."² However, it was through boosterism that park planning became an economic objective to capitalize on climate and outdoor living.

Early Los Angeles reformers for city planning had advocated an expressed need for parks. Angeleno Dana Barlett wrote in his 1907 *The Better City* that "no scheme for beautifying the city can be complete that does not include a comprehensive plan for a metropolitan park," anticipating parks created out of the ocean front and setting them aside for public use, as well as maintaining the riverbeds as a "nature preserve and playground for the children of the 'congested areas' east of Downtown."³ Another park advocate was Griffith J. Griffith, benefactor of Griffith Park, a 4000-acre site and one of the largest urban parks in North America. Griffith's follow-up to Barlett's book entitled, *Parks, Boulevards and Playgrounds* argued that parks and playgrounds brought social reform. Perhaps recognizing the value of park and parkways systems elsewhere in the U.S., boulevards "could be an extension of the park; just as the park itself is an expanded boulevard."⁴

By 1919, the downtown and central district of Los Angeles were the densest in population, housing over 50% of city residents. Population grew quickly from 500,000

² Mike Davis, *Ecology of Fear: Los Angeles and the Imagination of Disaster* (New York: Henry Holt and Company, Inc., 1998), 62. See also Helen Hunt Jackson, *Ramona* (Boston: Little, Brown and Company, 1884).

³ Dana Bartlett, *The Better City; A sociological study of a modern city* (Los Angeles: The Neuner Company Press, 1907), 44.

⁴ Griffith J. Griffiths, *Parks, Boulevards, and Playgrounds* (Los Angeles: Prison Reform League, 1910), 20, as quoted in Greg Hise and William Deverell, *Eden by Design: The 1930 Olmsted-Bartholomew Plan for the Los Angeles Region* (Berkeley: University of California Press, 2000), 17.

residents in 1920 to over 1.2 million by 1929.⁵ Growing the city through the 1920s, Los Angeles annexed lands including 45 adjacent communities, from the San Fernando Valley to the north, Westgate Additions on its western edge, to a shoestring of blocks called the Harbor Gateway that extended to the Long Beach Harbor to ensure shipping taxes were paid to Los Angeles, making Long Beach the second largest city and its southern anchor (Figure 2.1). Land use in the county varied greatly from oil fields, agriculture, shipping, railroads, industrial sites to sleeper suburbs, but parks were woefully absent.

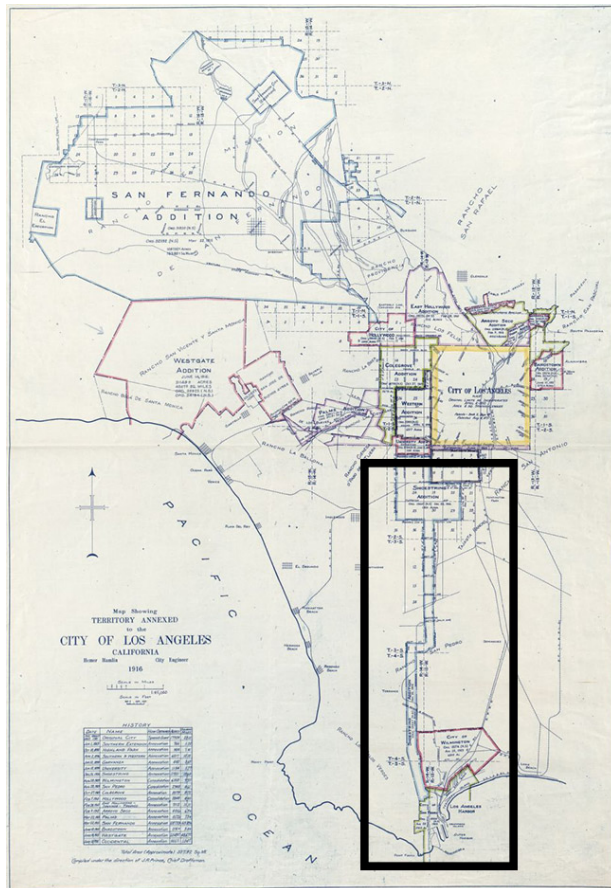


Figure 2.1: Map showing territory annexed to the City of Los Angeles, 1916. Shoestring of property ownership maintained by Los Angeles ensured taxes from shipping. Credit: Library of Congress Geography and Map Division Washington, D.C.

⁵ Jules Tygiel, "Introduction, Metropolis in the Making: Los Angeles in the 1920s," *Metropolis in the Making: Los Angeles in the 1920s* (Berkeley: University of California Press, 2001), 1-9. Tygiel writes that by the end of the 1920s and the effects of migration due to the Depression, Mexicans uprooted by the Mexican Revolution, and African Americans leaving the Southern United States, Los Angeles had diversified to include African-American, Jewish, Armenian, Italian and Russian communities, creating a melting pot of cultures in the city, with most living on the east side of the Los Angeles River.

In 1926, the Olmsted Brothers along with planner Harland Bartholomew were hired to develop a far-reaching park and parkway system for Los Angeles. Published in 1930, *Parks, Playgrounds and Beaches for the Los Angeles Region* was a comprehensive master plan intended to respond to Los Angeles politics, culture, and ecology. Davis calls this report a “stinging criticism of the giddy twenties building boom, which after its collapse in the oil scandals of 1926 - 1928, left 175 square miles of vacant, unsold lots on the city’s fringes, but only a few hundred acres of new parkland.”⁶ A Citizens’ Committee had been organized to oversee this development proposal and the committee pointed out that the “most neglected are neighborhood parks and playgrounds within walking distance of the masses.” The dearth of parks, it can be argued, was largely based on the lack of commitment to the future growth of the community. Davis maintained that the developers and speculators’ refusal to include parks in their subdivisions were coupled with parsimonious homeowner groups who also refused to pass assessments for parks and recreation. Thus, while the population of Los Angeles swelled during the 1920s, available lands for parks shrank.

Mike Davis’ *Ecology of Fear: Los Angeles and the Imagination of Disaster* provides the most realistic depiction of Los Angeles’ environmental conditions in a move away from utopian interpretations, while also addressing the politics which influenced urban planning. In his careful study of the Olmsted Brothers plan park for Los Angeles, Davis notes that the way Olmsted and Bartholomew attempted to thwart speculators was to develop “hazard zoning” by policies that barred development in floodplains and hillsides (which Davis suggests meant areas known for earthquakes and chronic wildfires.). He adds, “Together with radically enlarged public ownership of ocean frontage, the redemption of Los

⁶ Davis, *Ecology of Fear*, iii, iv, quoting, “Testimony of Frederick Law Olmsted, Jr. to Citizens’ Committee on Parks, Playgrounds and Beaches,” *Los Angeles Times*, 22 February 1928; and Los Angeles County, Regional Planning Commission, “Preliminary Report on Existing County Parks” (Los Angeles, 1928). See also Marc Weiss who describes the real estate speculation collapse in the mid-1920s writing that “one could travel for miles through Los Angeles and see the occasional stores interspersed with acres of vacant lots of growing weeds. In the interior between the major streets, one generally saw a sparse collection of small houses lived in by speculative lot owners, run-down rental houses, and more acres of weed lots.” Weiss cites Los Angeles Zoning Administrator Huber F. Smutz, in “Zoning: Past-Present-Future,” an unpublished manuscript in possession of author, Marc Weiss, *The Rise of Community Builders: The American Real Estate Industry and Urban Land Planning* (New York: Columbia University Press, 1987), 11.

Angeles's riparian landscapes was the key to Olmsted and Bartholomew's elegant design for a unified regional system of beaches, parks, playgrounds and mountain reserves." Davis continued that "Olmsted and Bartholomew argued that greenbelts (or 'pleasureway parks'...) flanking these channels could simultaneously provide flood control, recreation and transportation."⁷ Using hazard zoning to force down land values, Davis argued, was to "stop the ill-directed spread of population," with Olmsted and Bartholomew proposing to "transform the major flood channels and associated wetlands into a 440-mile network of multipurpose parkways reminiscent of Frederick Law Olmsted, Sr.'s famous 1887 'Emerald Necklace' design for Boston's Back Bay Fens." Davis points out in his footnote that this multiuse of parkways was an Olmsted trademark also achieved in the Olmsted Brothers' design for the Baltimore park system in 1904. In this thesis, while recognizing Davis' argument that hazard zoning was one way to move design around politics, this thesis will argue that the second purpose of moving people out of the floodplain had an ecological purpose: that of protection of the rivers themselves. Somewhat addressing this idea, Davis noted that parkways would thus be "designed to reinforce the role of natural hydrology in dividing up the otherwise monotonous coastal plain in attractive, well-defined community landscapes."⁸

Davis also addressed the 1930 plan with regard to social justice when he wrote that "Olmsted and Bartholomew's plan explicitly redistributed park and open space resources to the advantage of the neglected working-class districts south and east of Downtown" as he quoted the report:

Those of lower incomes generally live in small lot, single-family home districts, and have more children and less leisure time in which to go to distant parks and recreational areas. These families comprise 65 percent of the population, and they should be given first consideration."⁹

While the plan did provide a wide dispersal of parks and playgrounds through Los Angeles County, this thesis will argue that in fact Olmsted, Jr. directed the routing of parkways through more wealthy neighborhoods over poor ones. Land was taken by eminent domain more readily from poor neighborhoods than affluent ones.

⁷ Davis, *Ecology of Fear*, 66.

⁸ Davis, *Ecology of Fear*, 67.

⁹ Davis, *Ecology of Fear*, 67.

Eden by Design: The 1930 Olmsted-Bartholomew Plan for the Los Angeles Region, authored by urban and social historians Greg Hise and William Deverell, published the report *Parks, Playgrounds and Beaches* for the first time, and though their accompanying essay is only 63 pages, it provides the most comprehensive overview of the plan. Hise and Deverell's narrative focused on the political subjugation of the report; how business leaders who initially supported park development later rejected the plan as businessmen would lose development control in Los Angeles; and how the years-long and encompassing proposal never received public discourse. They argued that the report's sponsor, the Los Angeles Chamber of Commerce, was one of the most powerful commercial bodies of its kind in the American West. Quoting Chamber President Lacy in 1926, "What we want to take care of is the poor people, the working people. Build parks right in the center of the city like they have in the Plaza now." Chamber Director Hill added that one could not go to the beach without stepping on someone's private property.¹⁰ The intention of, what they called, the Olmsted-Bartholomew report was not only to propose parks, but road layouts and flood protection.¹¹ While the political rejection was due to power and cost, Hise and Deverell noted that this influential decision was made during a period of contentious popular debate regarding loss of beach access to private development, ocean pollution from oil drilling, and sludge from shipping.¹²

Mike Davis adds that the media of the time also deterred the 1930 park and parkway plan. *The Los Angeles Times* "disdained proposals to municipize almost 100,000 acres of private land and to triple the area of public beach frontage. It crusaded against legislation to establish a metropolitan park district to carry out the plan, denouncing it as 'the greatest combination of power, taxation and bonding burden in history.'" Under pressure from the paper, 27 members of the Citizens' Committee withdrew their support, thus suppressing it from ever being published.¹³ Defeat of the plan came not only from media pressure, but Angelenos usually deferred to private property rights as Fogelson points out that under planning conditions, owners often sought an exception to development of their own property. Explaining why planning made few advances during the early 20th century, "all too often the authorities were so anxious about physical

¹⁰ Hise and Deverell, *Eden by Design*, 32, 35

¹¹ Hise and Deverell, *Eden by Design*, 39.

¹² Hise and Deverell, *Eden by Design*, 45.

¹³ Davis, *Ecology of Fear*, 68, quoting *Los Angeles Times*, 12 and 14 March 1929.

improvements, the organizations so worried about the municipality's credit, and the voters so concerned about increased realty taxes that they were unreceptive to the planner's appeal."¹⁴

In studying the 1930 proposal, Hise and Deverell's research provides a comprehensive literature review from reports and journals at the time. They found that the lack of discussion about the report was omitted from not only publication in local newspapers, but there was also no follow-up from the usually attentive professional and civic organizations at the time, including the Regional Planning Commission, the Los Angeles Parks Department, the city's Playground and Recreation Department, Los Angeles City Club, Municipal League and other businessmen and professionals who followed local policy, planning, and politics. Hise and Deverell's research included searching among national publications for landscape architecture, urban planning, city design, and public administration and still they found no publication of the report, despite the prominence of Frederick Law Olmsted, Jr. and Harland Bartholomew at the time.¹⁵ The lack of public discussion sharply contrasts with what Hise and Deverell argued was a report which "marks a critical juncture in the history of regional planning in Southern California."¹⁶

While Hise and Deverell offer a rich analysis of the politics of the plan, in their essay they challenged that further interdisciplinary study was warranted of the Olmsted Brothers. Their review of the literature argued for an insertion of the American West into discourse as previous Olmsted scholarship has focused on the firm's work in the Eastern United States. "Invariably the Olmsteds illustrated their lectures, talks, and writings with examples drawn from Boston, Brooklyn, Washington, D.C., Baltimore, and Chicago," wrote Hise and Deverell. "This is not to say that western cities, or Olmsted projects in western states, are entirely absent in the relevant literature. Nevertheless, the generation of singular case studies considered in isolation is quite different from analyses and interpretations that are national in scope or at least regionally exclusive."¹⁷

The Olmsted firm's California work of over 200 projects ranks fourth after New Jersey, and benefitted from among the highest number of designs completed or proposed by the Olmsteds for any state across the country.¹⁸ Hise and Deverell concluded that "it is

¹⁴ Fogelson, *Fragmented Metropolis*, 254, 260.

¹⁵ Hise and Deverell, *Eden by Design*, 5.

¹⁶ Hise and Deverell, *Eden by Design*, 47-48.

¹⁷ Hise and Deverell, *Eden by Design*, 53.

¹⁸ See Appendix 1 for full list of Olmsted Brothers projects in California.

imperative that we enhance our collective understanding of the firm, its practice, and the ways in which an inclusive focus on the Olmsted and Bartholomew and Associates legacy can illuminate questions of urban planning, politics and power both historically and in our own time.”¹⁹ In a new way, this thesis interprets the 1930 report not only through an analysis of the report, but related construction documents developed during the late 1920s. Rather than the lens of a social historian, this thesis analyzes documents through an expertise in landscape architecture, to understand how the park and parkway proposal would nestle into the existing hydrological patterns of the rivers, provide accessible green space for all residents of the county, and connect disparate development in order to seek alignment with the theories and design process of Frederick Law Olmsted, Jr.

In a follow-up to *Eden by Design*, a special issue on the Olmsted-Bartholomew report was published by *Planning Perspectives*.²⁰ Within this publication was an essay written by Marguerite Schaffer, “Scenery as an Asset: Assessing the 1930 Los Angeles Regional Park Plan,” in which she argued that the report “did not have an environmental agenda, but sought to preserve and create scenery.” Schaffer further stated that the Olmsted-Bartholomew report “didn’t protect watersheds and wetlands as unique ecosystems, but preserved and created scenic vistas, recreational spaces and verdant parkways...Scenery had cultural, economic and social value rather than ecological and environmental significance.”²¹ This thesis will look to evidence that counters Schaffer’s perspective, exploring the proposed design not simply in historic perspective, but through understanding the language of landscape architecture and the documents in the proposal. This thesis seeks to correct the perception that the Olmsted firm relied only on 19th century aesthetics, rather than early ecological understanding of designing with the watershed.

Mike Davis concluded that if the 1930 park and parkway plan had been implemented, “the existing hierarchy of public and private spaces in Los Angeles might have

¹⁹ Hise and Deverell, *Eden by Design*, 53.

²⁰ In this special issue of *Planning Perspectives*, Hise and Deverell included their essay, “The ‘art political’ and Los Angeles park planning,” as well as those by Marguerite Schaffer and Terence Young. Young’s “Moral order, language and the failure of the 1930 recreation plan for Los Angeles County” argues that the Olmsted-Bartholomew plan failed because it did not respond well to its audience of non-planners. The language and charts in the report were scientific and not romantically appealing in contrast to *Report of Proposed Park Reservations for East Bay Cities* published the same year by Olmsted, Jr. and Ansel H. Hall.

²¹ Marguerite S. Schaffer, “Scenery as an asset: assessing the 1930 Los Angeles regional park plan,” *Planning Perspectives* 16, no. 4 (2001): 359.

been overturned. A dramatically enlarged commons, not the private subdivision, might have become the commanding element in the Southern California landscape.”²² This legacy of subdivisions also involved the Olmsted Brothers and while the firm’s community planning included comprehensive green space design, this period also spoke to the influence and role of developers. Noted planner John Nolen wrote in “Real Estate and City Planning,” 1916, that the best developers on the west coast were Mason-McDuffie for St. Francis Wood and E.G. Lewis for Atascadero, with Lewis later to develop Palos Verdes Estates from 1921 - 1923. In agreement with Nolen, Marc Weiss adds to this short list California developer Walter Leimert.²³ McDuffie, Lewis, and Leimert all shared values of environmental stewardship and judicious planning within their projects. All three developers would also work closely with the Olmsted Brothers in a shared understanding of planning for the long-term, rather than quick profits.

Similar progressive developers were working in other parts of the United States.

John Nolen continued:

Not only has the developer of the Country Club District of Kansas City practiced his own preaching, but the advantages of good planning have been recognized and applied particularly in the last two or three years by subdividers in all parts of the country: on the east coast, in Roland Park out of Baltimore, and in Forest Hills Gardens, the Russell Sage Foundation development on Long Island, NY; in the south, by the Stephens Company, of Charlotte, N.C., and in the steel city of Fairfield, Ala., one by the E.H. Close Company of Toledo, the Kissell Companies, of Springfield, the King Thompson Company, of Columbus, and in the Ottawa Heights development, of Cleveland, in Indiana, by the Wildwood Builders, of Ft. Wayne.²⁴

It’s interesting to note that within this national list that the Olmsted Brothers designed Roland Park, Forest Hills Gardens, and Ottawa Hills Tract in Toledo, working with the most progressive developers at the time.

Clearly a supporter of the Olmsted Brothers, John Nolen wrote in a later article that the design of Palos Verdes Estates, California was a “complete and perfected plan of community development” encompassing all the planning ideals.²⁵ Fogelson adds that this

²² Davis, *Ecology of Fear*, 68.

²³ John Nolen, "Real Estate and City Planning," *The City Plan* 2, no. 1 (April 1916): 3-4. See also Marc Weiss, *Rise of Community Builders*, 6-7.

²⁴ Nolen, "Real Estate and City Planning," 3-4, as quoted by Marc Weiss, *Rise of Community Builders*, 57.

²⁵ John Nolen, *New Towns for Old* (Boston: Marshall Jones Co., 1927), 137.

garden suburb was “quintessential Los Angeles,” and as this thesis will affirm, its design looked to California for inspiration. Thomas Gates and Delane Morgan have the most comprehensive analysis of the design history of Palos Verdes.²⁶ Gates traces the community from its inception in 1914 through development in the 1920s. Within his essay, Beverly Hills was noted as a comparable residential subdivision, designed by Olmsted-trained Wilbur D. Cook in 1906. A product of his training, Cook’s design wove Beverly Hills into the site’s topography with meandering roads, and interspersed parks throughout the subdivision. In social critique of both Palos Verdes and Beverly Hills, Banham Reyner drolly notes, as topography rises in Los Angeles, so do owner’s incomes.²⁷ Possibly that explains Gates’ contrast of Palos Verdes and Beverly Hills with a third comparable development for middle to lower incomes, land purchased by the Los Angeles Suburban Homes Company which acquired 47,000 acres in the San Fernando Valley in Los Angeles in 1911. Unlike Cook and the Olmsted Brothers, the latter subdivision was more representative of typical developments of the era with no apparent fore-planning of interesting streets, lots, or themed town centers.²⁸ Writing about Palos Verdes, Delane Morgan began her narrative with the site’s prehistory and extended to the period of book publication in the 1980s. Though comprehensive, and with Gates’ reliance on primary documentation from the Olmsted office, both Morgan and Gates focus more on the site’s cultural history rather than its ecological design. This thesis, therefore, seeks to blend both perspectives, understanding the relationship of culture and natural systems, and the design expression that captured both.

Transportation

The development of parkways in Los Angeles was another significant urban intervention by the Olmsted firm. Los Angeles in the 1920s was changing its mode of transportation from 19th century models of the Red Car lines and railroads to automobility

²⁶ See Thomas Gates, “The Palos Verdes Ranch Project: Olmsted Brothers’ Design Development for a Picturesque Los Angeles Suburb Community of the 1920s,” *Architronic* (May 1997), accessed January 10, 2015, <http://architronic.sead.kent.edu/v6n1/v6n1.03ref.html>. Also, Delane Morgan, *The Palos Verdes Story* (Palos Verdes Peninsula: Palos Verdes Peninsula Library Foundation, 1983).

²⁷ See Banham Reyner, *Los Angeles: The Architecture of Four Ecologies* (New York: Harper & Row, 1971).

²⁸ Thomas Gates, “Palos Verdes.”

for which the city is now synonymous. The city's rapid population growth was unique amongst American cities, as Los Angeles developed in concert with the availability of low cost, mass-produced automobiles.²⁹ Unlike the East Coast with a history of roadways, infrastructure in Los Angeles was being developed as quickly as the land was developed, though without a master plan for connectivity. The fast pace of development created conflict between horse drawn railways and automobiles as transportation historian Matthew Roth writes:

In 1889...the superintendent of streets pronounced that the city's public rights-of-way were in a "perfect chaotic state." The proliferation of horse-drawn street railways had followed no pattern beyond the competition of rail entrepreneurs for the busiest routes and the efforts by land speculators to provide transportation to their subdivisions. Parallel and overlapping street railways caused congestion in the business district and around the railroad depots, while in newly developed residential areas the hastily drawn streets bore no logical relationship to the adjacent through highways or to the streets in neighboring subdivisions.³⁰

While automobility was at the forefront, some aspects of transportation attempted to follow the trajectory of most metropolitan cities. Southern Pacific magnate Collis P. Huntington and his nephew Henry Huntington had purchased the financially declining Los Angeles Consolidated Electric Railway in 1898, repainting and renaming the trolleys Red Cars. Henry Huntington saw an opportunity to build small-scale transportation and began to purchase open lands in Los Angeles to establish tracks and in 1902, built the first line of his Pacific Electric commuter line from Los Angeles to Long Beach. The Southern Pacific Railroad bought out Huntington in 1911, and Pacific Electric took over this line. The result was called the "Great Merger" and Pacific Electric became the largest operator of interurban electric railway passenger service in the world, with over 1,000 miles of track.³¹ Open lands were often available along the sparsely populated Los Angeles, San Gabriel, and Rio Hondo Rivers which were purchased and lined by railroad tracks and trestles, land use that would later contribute to the effects of major flooding along these rivers. The

²⁹ Matthew Roth, "Concrete Utopia: The Development of Roads and Freeways in Los Angeles, 1910-1950" (Ph.D. diss., University of Southern California, 2007), 154.

³⁰ Roth, "Concrete Utopia," 34.

³¹ "The History of the Red Car—Venice Short Line," Venice Heritage Foundation, last modified 2009, accessed January 29, 2017, http://veniceheritagemuseum.org/VHF/RED_CAR_HISTORY.html

Southern Pacific Railroad ultimately became the largest landowner of the floodplain. Mike Davis argues that Henry Huntington's high fares on the Ocean Park railway line, impeded working people from affordably going to the beach.

Thus, the demise of public transit in Los Angeles was a result of frustration with the Red Cars and railroads. The scattered location of subdivisions and the removal of streetcars in favor of equally over-filled buses created a situation of automobile preference for transportation, affording freedom and autonomy. Los Angeles historian Scott Bottles notes that a study in the 1920s found that 62% of people drove to the downtown central business district with another 86% driving to the suburbs of Pomona and Westwood.³² He added, however, that this was not unique to Los Angeles, as by the 1920s, American metropolises also heavily depended on the automobile. Older American cities like Boston, Chicago and San Francisco had layers of urban growth with strong centralization of the business district. The *decentralization* of Los Angeles in the early 20th century, however, made it easier for the city to adapt to automobiles with its sprawling urban expansion.

Increasing numbers of cars in the downtown core were in conflict with the limited street space shared with streetcars and trucks. In Los Angeles, Bottles writes, "impatient for a solution, the region's property owners and businessmen took control of the situation themselves. With the approval of the city government, they organized a systematic program to reconstruct the municipal street system. This concerted effort to widen and open the city's roads greatly improved automobile access," and was known as the *Major Traffic Street Plan*.³³ The 1924 plan was developed by Frederick Law Olmsted, Jr., Harland Bartholomew, and city planner Charles Cheney, who were hired to solve the traffic problem of streets designed for 19th century modes of transportation. Olmsted, Jr. wrote, "The place of the automobile in the transportation problem of Los Angeles is far more important than in cities of the east" as one out of every two Angelenos owned a car. "Los Angeles has reached a stage in its development where it has to plan a comprehensive park and boulevard system to meet its future traffic needs. Without such a plan, the city will find itself with ridiculously narrow and inadequate streets," Olmsted, Jr added.³⁴ From a planning perspective, Olmsted, Jr. saw no shortage of roads in the city, but a haphazard

³² Scott Bottles, *Los Angeles and the Automobile: The Making of the Modern City* (Berkeley: University of California Press, 1987), 4.

³³ Bottles, *Los Angeles and the Automobile*, 16.

³⁴ Bottles, *Los Angeles and the Automobile*, 92, 97.

pattern of private real estate development. He faulted developers who created severe congestion by providing only for local traffic while paying no attention “to the needs of the city as a whole.”³⁵

Los Angeles historian Matt Roth adds that boosterism also extended to the automobile as seen in a 1925 advertisement that tried to capture all elements of Los Angeles: “People! Automobiles! Buildings! Orchards! Farms! Oil! Ships! Factories! Climate! Vast stretches of undeveloped land! Mountains! Resorts! The Ocean! Ah! Los Angeles!”³⁶ Roth wrote that “the Traffic Commission’s publicity on behalf of the [*Major Traffic Street Plan*] fused with other promotional efforts based on establishing an image of Los Angeles as distinct from other places. The result was a lasting reputation for Los Angeles as a city with a unique culture of automobility.”³⁷ In critique, however, Roth notes that in the *Major Traffic Street Plan*, the “consultants themselves downplayed the utility of the Plan because it isolated traffic as an object of study, thus violating a basic principle that Olmsted, Bartholomew and Cheney all insisted upon: plans must be comprehensive to be effective, involving not just transportation but also land use, parks, zoning and all the other issues concerned with the physical character of a city.” At the same time, their professional recommendations could lead to further planning opportunities which later was true for Olmsted, Jr. and Bartholomew.³⁸

The *Major Traffic Street Plan* solved traffic congestion for only a short period, but the greater value in transportation would come from design of parkways. Parkway designs were an entrée into integration of a range of landscape elements in Los Angeles, not only providing long-term work, but allowed the Olmsted firm to develop designs in concert with the natural conditions and cultural influences of the region. While the *Major Traffic Street Plan* is well-documented, the latter form of parkways designed by the Olmsted Brothers has only been mentioned in passing in the literature, deserving a more comprehensive analysis.³⁹

³⁵ Bottles, 97, citing *Los Angeles Times*, 27 August 1922.

³⁶ As cited in Roth, Marshall Breeden, *California. All of It* (Los Angeles: Kenmore Publishing Co., 1925), 189.

³⁷ Roth, “Concrete Utopia,” 152.

³⁸ Roth, “Concrete Utopia,” 146.

³⁹ See Hise and Deverell, *Eden by Design*, 31-32

Water

The literature study of water in 1920s Los Angeles looked both to cultural practices as well as regional hydrology, especially the behavior of the rivers in Los Angeles. For the Olmsted Brothers, cultural expectations would need to be balanced with knowledge of local hydrological patterns if the firm was to design successful models for the region. City boosters had heralded Los Angeles as a city without rain in what was an invented climate in many ways. Los Angeles' Mediterranean ecology is such that rain falls from October through April, with little to no precipitation during the remainder of the year. Weather patterns in other parts of the United States included year-round rainfall, such that planners could design with expectation of regular water resources. Prolonged and extreme droughts were part of the natural cycle of the semi-arid west with repeated occurrences during this period from 1893 -1894, 1897 - 1900, and 1924 - 1935. While 15 inches of rain was typical for Los Angeles, drought years ranged from desperately low annual rainfall of four to six inches.

The Los Angeles River watershed initiates in the San Gabriel Mountains where streams deposit debris onto the San Gabriel Valley. During the early 20th century, these tributaries flowed over alluvial beds, sinking into porous sediments, leaving most riverbeds dry. Deep groundwater basins stored the water until it overflowed, exiting through Whittier Narrows where it would finally flow once again above ground (Figure 2.2).⁴⁰ The geology of Los Angeles creates a series of underground water storage basins in which rivers only surface once these subterranean basins are full. Many newcomers from the East Coast and Midwest didn't understand these water patterns and that, in fact, the entire Los Angeles County was essentially a floodplain.

⁴⁰ Jared Orsi, *Hazardous Metropolis: Flooding and Urban Ecology in Los Angeles* (Berkeley: University of California Press, 2004), 27.

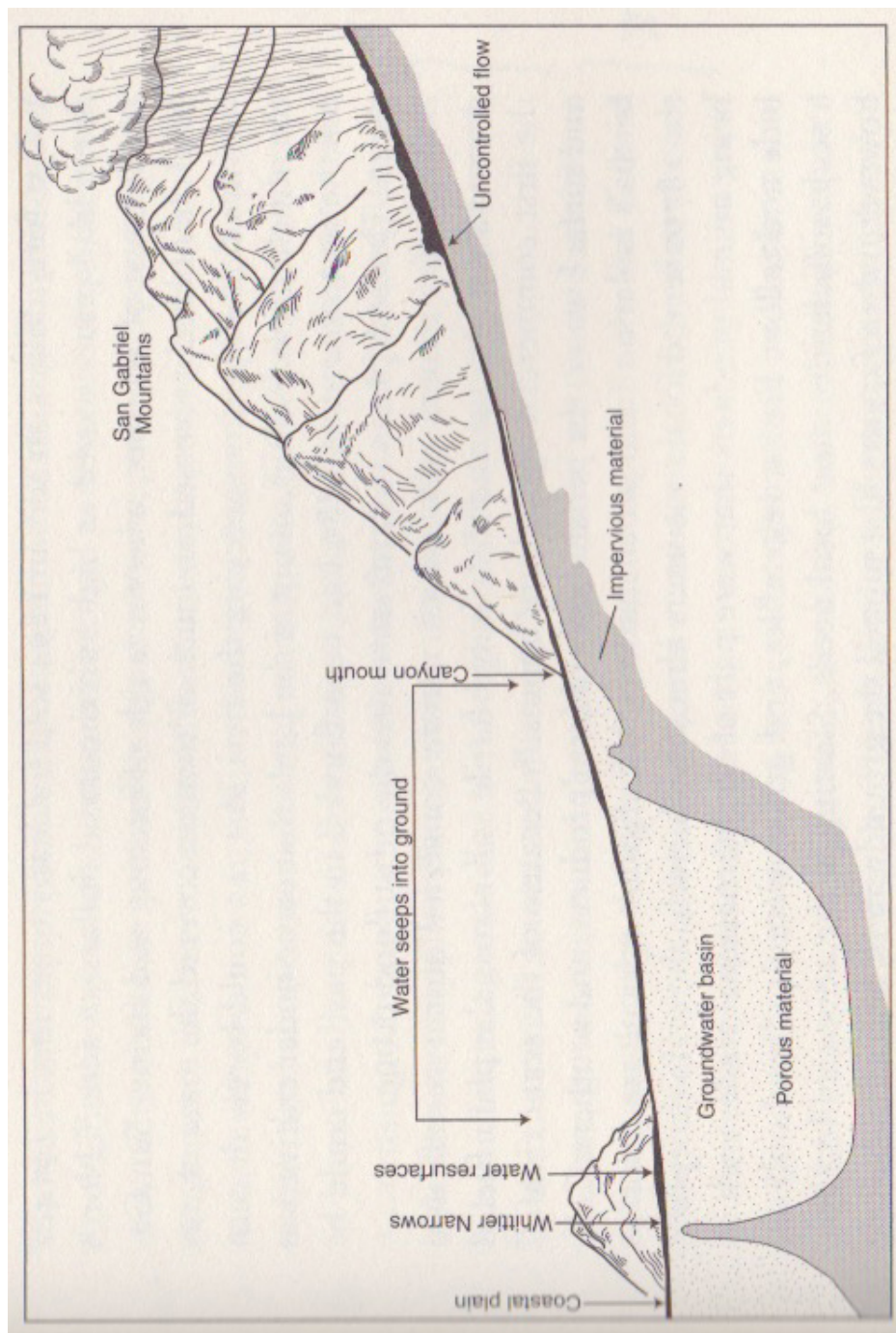


Figure 2.2: Geology of Los Angeles Basin. Section shows the underground hydrological patterns such that stormwater coming off of the San Gabriel Mountains is retained in groundwater basins in the natural porous materials at the base of the mountains. Credit: Jared Orsi, *Hazardous Metropolis: Flooding and Urban Ecology in Los Angeles*, 2004, 27.

Los Angeles River historian Blake Gumprecht writes that homes were built not only in the floodplain, but *in* the dry river and stream beds as well, believing that their land would remain unaffected. New development regularly occurred along the river edges, where native plants such as willows and cottonwoods had previously slowed the water and prevented erosion and overflow of the banks. Reducing the natural flood control, these trees were cut for firewood or building materials, and the understory plants in low-lying areas which had also slowed water flow were cleared for agricultural use. Plowing these lands removed the natural grass cover, increasing runoff and erosion.⁴¹

Newly-built embankments for the railroads and bridges that crossed the rivers often trapped debris, causing new flooding that demolished farms and houses that seemingly were out of the river's reach. By the 1920s, intermittent flooding had been partially mitigated through a series of check dams and other ways of blocking stormwater from devastating communities. The three rivers—Los Angeles, San Gabriel, and Rio Hondo—had been deepened and widened, but essentially maintained their normal patterns across the flat plains of Los Angeles County.

Any flood work by the city of Los Angeles was typically minimized as the Los Angeles River was not considered a navigable stream, and thus most of its channel was privately owned. Gumprecht notes that since the city was required to purchase river corridors in order to do any work, flood control resulted in overly narrow beds.⁴² Communities that were built during the boom years of the 1920s, such as the industrial towns of Maywood, Bell, Southgate, and Lynwood, constrained flood control planners who lacked the resources of private developers and who, moreover, did not have the legal authority to prevent homes from being built in flood-prone areas.⁴³

Drought is a better characterization of Los Angeles, however, than inundation of water. The historic Spanish irrigation system of *zanjas* were abandoned as inadequate between 1888-1901, forcing agricultural production to move out of the city. And residential water use in 1901 was 306 gallons of water per day, three times the rate of consumption of other major American cities, with little interest in water conservation.⁴⁴

⁴¹ Blake Gumprecht, *The Los Angeles River: Its Life, Death and Possible Rebirth* (Baltimore: Johns Hopkins University, 1999), 151. This encompassing book provides a biography of the Los Angeles River from Spanish land grants to the present.

⁴² Gumprecht, *Los Angeles River*, 182.

⁴³ Gumprecht, *Los Angeles River*, 198.

⁴⁴ Gumprecht, *Los Angeles River*, 96.

Exponential population growth reduced water sources such that the Los Angeles Aqueduct was required by 1904. Piped in over the course of 223 miles, water was diverted from the Owens River, east of Los Angeles in the Sierra Nevada mountain range, to the San Fernando Valley in Los Angeles to provide water for the growing city. Chief executive of Los Angeles' new city water department William Mulholland urged Los Angeles city officials to limit population growth and was the main proponent for development of the aqueduct. Yet even with this plea, he oddly aligned with the greater population that profligate use of water was acceptable, justifying, "It is desirable that [water use remain high with a] bountiful supply of water being necessary to the maintenance of the beauty for which the city is famous."⁴⁵ When the aqueduct was ceremoniously opened, Mulholland is famously quoted as saying about water, "There it is. Take it." The aqueduct was calculated at the time to provide four times the necessary amount for Angelenos' overuse of water, with Mulholland's engineering feat a way to ensure Los Angeles remained irrigated and green year-round, despite this unsustainable rejection of the regional ecology.⁴⁶ Mulholland's words would also captured the sentiment of the day that cultural use of water need not be responsive to arid conditions. Unfortunately, new availability of supplemental water from the Owens River Valley and later further taking of water from the Sierra Nevada mountains, only increased population growth with an enlargement of this pipe extended in 1940, and another parallel aqueduct line added in 1970 due to Los Angeles' unquenchable thirst. Part of a continuing cultural and natural pattern, water management has been in crisis mode throughout the 20th century.

As the Olmsted Brothers entered Los Angeles society, there were established ideas of what city residents and boosters envisioned for their community. In a 1927 memo to himself, Olmsted, Jr. jotted his impressions of Los Angeles noting, "In this community extraordinary exaggeration, excessive optimism, discounting the future values and underestimating the cost of – values...water the big problem."⁴⁷ Along with community building and transportation, water issues would be a key issue to be addressed by the firm in their projects.

⁴⁵ Gumprecht, *Los Angeles River*, 101.

⁴⁶ See also William L. Kahrl, *Water and Power: The Conflict over Los Angeles' Water Supply in the Owens Valley* (Berkeley: University of California Press, 1982).

⁴⁷ Frederick Law Olmsted, Jr., Memo, 24 May 1927, [Los Angeles County, General], #8100, Records of the Olmsted Associates, Manuscript Room at the Library of Congress, hereafter referred to as O.A. Papers.

FREDERICK LAW OLMSTED, JR. AND A LEGACY OF ECOLOGICAL PLANNING

The challenge of studying the work of Frederick Law Olmsted, Jr. is that while many authors reference the Olmsted Brothers, there is very little in-depth research solely on Olmsted, Jr., and no biographies published on either John Charles or Frederick Law Olmsted, Jr. Perhaps the most comprehensive book on the Olmsted oeuvre is *The Master List of Design Projects of the Olmsted Firm, 1857-1979*.⁴⁸ Yet, while comprehensive, it is more a listing of projects rather than a scrutiny of them.

Those who have written on Olmsted, Jr. have focused on his work as either a city or wilderness planner. Susan Klaus' *Modern Arcadia: Frederick Law Olmsted, Jr. and the Plan for Forest Hills Gardens* analyzes the Olmsted Brothers' design for this first American Garden City.⁴⁹ Klaus provides a brief background on Olmsted, Jr.'s early career and relationship with his father, but Klaus' scholarship has focused on the firm's planning ideals. Jon Peterson also interrogates the birth of city planning and Olmsted, Jr.'s integral role in the discipline in the early 20th century as does John Pittari, Jr., whose research concentrates on Olmsted, Jr. and the American Planning Movement.⁵⁰ Ethan Carr's scholarship includes Olmsted, Jr. and his integral role in wilderness planning for the National Park Service.⁵¹ With the exception of Carr, who is a practicing landscape architect, none have analyzed Olmsted, Jr.'s work through the lens of landscape architecture and its different approach and technical understanding of design with the land.

⁴⁸ See National Association for Olmsted Parks and Frederick Law Olmsted National Historic Site. *Master List of Design Projects of the Olmsted Firm, 1857-1979*, eds. Lucy Lawliss, Caroline Loughlin and Lauren Meier (Washington, D.C.: National Association for Olmsted Parks, 2008).

⁴⁹ See Susan Klaus, *A Modern Arcadia: Frederick Law Olmsted Jr and the Plan for Forest Hills Gardens* (Amherst: University of Massachusetts Press, 2002).

⁵⁰ See Jon A. Peterson, "Frederick Law Olmsted Sr. and Frederick Law Olmsted Jr.: The Visionary and the Professional," In *Planning the Twentieth-Century American City*, eds. Mary Corbin Sies and Christopher Silver (Baltimore: Johns Hopkins Press, 1996): 37-54; Jon A. Peterson, "The Birth of Organized City Planning in the United States, 1909-1910" *Journal of American Planning Association* 75, no. 2: 123-133. See John J. Pittari, Jr., "Practical Idealism: Frederick Law Olmsted, Jr. and the Modern American City Planning Movement," (Ph.D. diss., University of Washington, 1997).

⁵¹ See Ethan Carr, *Wilderness by Design: Landscape Architecture & the National Park Service* (Lincoln and London: University of Nebraska Press, 1998).

Perhaps the most focused association of Olmsted, Jr. and landscape architecture is through the work of Melanie Simo and her two publications: *100 Years of Landscape Architecture: Some Patterns of a Century* and *The Coalescing of Different Forces and Ideas: A History of Landscape Architecture at Harvard, 1900-1999*.⁵² Olmsted, Jr. organized the first landscape architecture program at Harvard University in 1900 and was also one of the original founders of the American Society of Landscape Architects. Both of these texts offers insights into the development of the profession of landscape architecture under heavy influence of Frederick Law Olmsted, Jr., offering some context to Olmsted, Jr.'s definition of the discipline.

Because of the largess of projects located on the East Coast, and for which the Olmsted firm is better known, literature has more heavily focused on projects in Massachusetts, New York, Pittsburgh, Washington, D.C., Baltimore and Chicago. Within these cities, the Olmsted Brothers designed numerous landscapes from park systems to private estates. Olmsted, Jr.'s 50 years of work on the redevelopment of Washington, D.C. known as the McMillan Plan and begun in 1909 has also engendered study. Two books have centered on Fairsted and the Olmsted office in Brookline, Massachusetts, providing a chronology of the Olmsted firm up to its final closure in 1979.⁵³ Individual scholars have focused on particular regions of project work by the firm including Jeanne Kolva on New Jersey; Noel Dorsey Vernon on Ohio; Wiliam J. Hawkins on Portland; and Catherine Joy Johnson on Seattle.⁵⁴ Only this thesis has solely focused on the firm's California work.

⁵²See Melanie Simo, *100 Years of Landscape Architecture: Some Patterns of a Century*, ed. American Society of Landscape Architects (Washington, D.C.: Spacemaker Press, 1999); Melanie Simo, *The Coalescing of Different Forces and Ideas: A History of Landscape Architecture at Harvard, 1900-1999* (Cambridge: The Harvard University Graduate School of Design, 2000).

⁵³See David Grayson Allen, *Olmsted National Historic Site and the Growth of Historic Landscape Preservation* (Lebanon, NH: University Press of New England, 2007); Keith N. Morgan, Elizabeth Hope Cushing and Roger G. Reed, *Community by Design: The Olmsted firm and the Development of Brookline, Massachusetts* (Amherst and Boston, MA: University of Massachusetts Press in association with Library of American Landscape History, 2013).

⁵⁴See Jeanne Kolva, *Olmsted Parks in New Jersey* (Atglen, PA: Schiffer Publishing, 2011); William J. Hawkins, III, *The Legacy of Olmsted Brothers in Portland, Oregon* (Portland: William J. Hawkins, III, 2014); Catherine Joy Johnson, *Olmsted in the Pacific Northwest: Private Estates and Residential Communities* (Seattle: Friends of Seattle's Olmsted Parks, 1997).

While this thesis' argument is situated in the 20th century, many current landscape architects and historians argue that the Olmsted firm was actually practicing ecological planning *during the 19th century*, contending a legacy of this practice by the firm. Theodore S. Eisenman framed three aspects of Frederick Law Olmsted, Sr.'s work within contemporary green infrastructure theory and practice: in ecosystem services and human well-being; environmental restoration; and comprehensive planning.⁵⁵ Catherine Howett writes that ecological values began with Olmsted, Sr. well before 20th century's progression into increased levels of ecological awareness and the concept of the human-nature relationship to the role of landscape architecture.⁵⁶ An essay by landscape architect Elizabeth Meyer is not implicitly an analysis of the ecological designs at Prospect Park and in Boston by Olmsted and Vaux, and the latter firm Olmsted, Olmsted & Eliot. Yet her historical assessment of Prospect Park was that Vaux increased the park's boundaries in order to increase ecological diversity of landscape types. Meyer argues that once contour lines align over the site plans (lines not shown on most published plans) that the designers worked with the geomorphology of the site. She adds that the Boston Park System in places like the Fens did not conform to typical landscape ideals of the Pastoral and Picturesque; rather the Fens' "spaces and systems were formed both to accommodate the nonhuman and natural processes of drainage, filtration, and collection of water."⁵⁷

Most explicit, however, is landscape architect Anne Whiston Spirn's essay, "Constructing Nature: The Legacy of Frederick Law Olmsted" in which she looks to new readings in the designs and reports by Olmsted, Sr. for Yosemite, Niagara Falls, the Biltmore, and Boston's Fens and Riverway. Spirn writes that Olmsted, Sr. used a general understanding of natural processes, though he had no existing models to guide him. "The Fens and the Riverway," she writes, "anticipated by nearly a century the introduction of 'ecological' planning and design in landscape architecture in the 1960s, the recent

⁵⁵ Theodore S. Eisenman, "Frederick Law Olmsted, Green Infrastructure and the Evolving City," *Journal of Planning History* 12, no. 4 (2013): 287-31.

⁵⁶ Catherine Howett, "Ecological Values in Twentieth-Century Landscape Design: A History and Hermeneutics," *Landscape Journal* 7, no.2 (1998): 80-98.

⁵⁷ Elizabeth K. Meyer, "The Expanded Field of Landscape Architecture," In *Ecological Design and Planning*, eds. George F. Thompson and Frederick R. Steiner (New York: John Wiley & Sons, Inc., 1997), 65.

appreciation of urban 'wilds,' and the 'new' field of landscape restoration.⁵⁸ Environmental behavior researcher Ervin Zube also acknowledges Olmsted, Sr. as an early ecological designer, noting plans developed for the Back Bay Fens and Muddy River in Boston "provided a far more comprehensive conceptualization of an open space system, one that established physical relationships within a landscape."⁵⁹

Olmsted firm principal Charles Eliot has also been included in the literature for his practice of ecological design. Michael Rawson writes, "Eliot was planner as much as preservationist. He not only protected green space but self-consciously shaped the development that would take place around it in years to come. Although sometimes forgotten today, this fact was touted at the time."⁶⁰ Landscape architect and urban planning professor Forster Ndubisi adjoins this assessment by writing, "[The Boston Park Plan] continued by Charles Eliot resulted in the first metropolitan park system planned around hydrological and ecological features. The significance of the plan is that it combined a concern for recreation, preservation of the natural landscape, and management of water quality."⁶¹ Eliot's biography published posthumously in 1902 by his father Charles W. Eliot is a compilation of letters, essays and reports that support firsthand Rawson and Ndubisi's arguments.⁶² As previously discussed, Olmsted, Olmsted & Eliot pioneered the use of an "overlay technique" to document, study and evaluate layered ecological maps, a precursor to contemporary GIS modeling and for which Ian McHarg gives credit to Eliot. This methodology later adopted by Olmsted-trained Warren Manning for his 1912 design in Billerica, Massachusetts, was well before Ian McHarg became famous for this technique in the 1960s.⁶³

⁵⁸ Anne Whiston Spirn, "Constructing Nature: The Legacy of Frederick Law Olmsted," In *Uncommon Ground: Rethinking the Human Place in Nature*, ed. William Cronon (London: W.W. Norton & Company, 1996), 108.

⁵⁹ Ervin Zube, "The Advance of Ecology," *Landscape Architecture* 76, no. 2 (1986): 62.

⁶⁰ Michael Rawson, *Eden on the Charles: The Making of Boston*. (Cambridge: Harvard University Press, 2010), 274.

⁶¹ Forster Ndubisi, *Ecological Planning: A Historical and Comparative Synthesis* (Baltimore: Johns Hopkins University Press, 2002), 10.

⁶² See Charles William Eliot, *Charles Eliot, Landscape Architect, a Lover of Nature and of His Kind, Who Trained Himself for a New Profession, Practiced It Happily, and through It Wrought Much Good* (Boston: Houghlin, Mifflin Company, 1902).

⁶³ It should be noted that McHarg fully credits Eliot with this ecological approach to design. Ian McHarg, *A Quest for Life: An Autobiography* (New York: John Wiley & Sons, 1996), 82. See also Ndubisi, *Ecological Planning*, 12 and Frederick R. Steiner, *The Living Landscape, A*

While there is a shared consensus among scholars that the 19th century Olmsted firm was practicing early ecological planning techniques, what is missing from the literature is that Frederick Law Olmsted, Jr. continued in this practice. It seems inconsistent that if Olmsted, Sr. and Eliot mentored and trained Olmsted, Jr. with their values and methods for landscape research and design response that Olmsted, Jr. would not have maintained those critical approaches and adapted them to the 20th century.

Others who have seen the connection of the Olmsted Brothers to an ecological design process include two noted Olmsted scholars. Arleyn Levee, whose scholarship has focused on John Charles Olmsted, provides insights into the design of Palos Verdes in her essay "The Olmsted Brothers' Residential Communities: A Preview of a Career Legacy" and begins to address the firm's particular way of designing within an understanding of ecological conditions of the site.⁶⁴ Additionally, landscape historian David Streatfield argues that during the 1920s a style emerged called regional design, in what he contends was achieved by only a few designers in California, often without them intending to create a specifically regional garden. Advocated by the Arts and Crafts Movement, these designers looked to borrow design traditions from similar regions, and in California, provided for patterns of use that took full advantage of California's climate. Like the practice in England, native plants and in Southern California, also drought tolerant plants, were incorporated into the designs. Two landscape architecture firms which practiced this way were the Olmsted Brothers and Lockwood de Forest of Santa Barbara. Linking the landscape to the site was further imbued by a design's use of the "borrowed view," or incorporating the colors and materials from the background view into foreground elements.⁶⁵ With all great respect to Streatfield, this thesis argues that the regional gardens designed by the Olmsted Brothers were intentional and based on a response to the regional ecology.

Focusing on the Olmsted firm's projects in Los Angeles, Mike Davis is explicit when he observes that Olmsted, Jr.'s plan for Los Angeles parks was "preserving natural

Second Edition: An Ecological Approach to Landscape Planning (New York: McGraw Hill, 2000).

⁶⁴ Arleyn Levee, "The Olmsted Brothers' Residential Communities: A Preview of a Career Legacy." In *The Landscape Universe: Historic Designed Landscapes in Context*, ed. Charles Birnbaum, 28-45 (Wave Hill, Bronx, New York: The Catalog of Landscape Records in the United States at Wave Hill in conjunction with the National Park Service Preservation Assistance Division, 1993).

⁶⁵ David Streatfield, *California Gardens: Creating a New Eden* (New York: Abbeville Press, 1994), 154, 176.

ecosystems” and Jr.’s advice for prevention of wildfires through open space planning was essential in considering sites in his State Parks’ acquisition plan.⁶⁶ And Greg Hise and William Deverell speak to the ecological component of the Los Angeles park and parkway report:

[The Olmsted-Bartholomew] report addresses the dangers of speculation and ‘injurious encroachment.’ The focus is resolutely on systems—the robust but ultimately endangered systems of nature in the mountains, high desert, the basin, and the Pacific coastline—and the ways these might be best integrated with urban systems, especially the infrastructure necessary for an expanding metropolitan region.⁶⁷

Hise and Deverell add that the vision from the 1930 report “retains its power, and the issues that county residents grappled with then are similar to those they are facing now. Coastal development, public access to beaches, preserving wetlands, encroachment into ecological sensitive habitats: each of these remains on the front page and front burner.”⁶⁸

How was the Olmsted Brothers firm, specifically Frederick Law Olmsted, Jr., trying to solve urban ecological problems through landscape architecture? What were the firm’s key concerns and approaches? Why was this process important? Did the projects succeed in their mission? How was the work in Southern California unusually challenging? This thesis will analyze projects and present evidence to answer these questions while adding important new research to the historiography of ecological planning. This thesis will address the Olmsted firm’s assessment of the physical, economic, and social elements of nature and culture in order to develop their designs in Los Angeles in hybridized landscape types. Closing the dates by 1931, the thesis argues that the Olmsted firm laid the groundwork for techniques and assumptions developed more fully during the 1930s and beyond, with evidence that ecological planning and design was a normative part of the Olmsted Brothers’ practice between 1914 - 1931.

⁶⁶ Davis, *Ecology of Fear*, 68, 105.

⁶⁷ Hise and Deverell, *Eden by Design*, 8.

⁶⁸ Hise and Deverell, *Eden by Design*, 9.

CHAPTER 3

RESEARCH METHODOLOGY

THESIS RESEARCH QUESTIONS

The choice of method was based on these broad thesis questions:

1. In developing ecologically responsive designs, how did the Olmsted Brothers' work fit within the ecological knowledge as well as cultural and political context of the era?
2. How can job correspondence from their Los Angeles County projects, as well as period imagery and construction plans from their built and unbuilt projects, provide further evidence of ecological planning within their regional designs?
3. Lastly, as the first comprehensive analysis of Olmsted Brothers landscapes in Los Angeles, how can their ideas provide insight to ongoing current concerns such as water management, sustainable urban planning, and hybridized, multifunctional landscapes?

In response to these questions, methodology focused primarily on archival research. The primary source materials, including letters, reports, plans, photographs and drawings, were the more substantive aspect of the research, with secondary resources providing contextual information.

APPROACH TO SOURCE MATERIAL

Repositories

As one of the most prolific as well as largest landscape architecture firms in the world during the 1920s, the Olmsted Brothers' project work needed to be carefully organized by the firm. The Frederick Law Olmsted National Historic Site (FLONHS), Frederick Law Olmsted, Sr.'s former home and the Olmsted office in Brookline, Massachusetts, is now owned by the National Park Service and archives over 1,000,000 historic documents. While the FLONHS is the largest conserved collection of Olmsted work, in the 1950s the Olmsted firm donated 75% of their job correspondence to the Library of Congress, Manuscripts Division, in Washington, D.C. There the documents were archived onto microfilm, with the remaining 25% of documents left loose in file folders in Brookline. While most of the plans, photographs, plant lists, and reports are located in Brookline, some important job plans were given to the Library of Congress such as the map of the proposed Los Angeles park system from *Parks, Playgrounds and Beaches for the Los Angeles Region* and the 1924 *Major Traffic Street Plan for Los Angeles*.

Each of the 6,000+ jobs for which the Olmsted firm consulted or designed was given a single job number. These numbers were used both for correspondence as well as plans developed for a given project. For the researcher, the firm correspondence contains rich historic documentation including discussion of design intent, correspondence with clients, contractors, and city officials, telegrams on updates to questions and plans, newspaper clippings, site grading estimates, budgets, and plant lists. In a fascinating study, there are also multiple drafts of reports that reveal the evolution of ideas through a series of edits to the final published report, such as Frederick Law Olmsted Jr.'s report for *Parks, Playgrounds and Beaches* and the *State Parks Survey*. These earlier drafts provided critical understanding of information that was removed from the final report and will be discussed in detail in later chapters.

While FLONHS and the Library of Congress have the most material on the Olmsted firm, the strategy for locating additional resource material was split between California and other East Coast repositories. For each of the repositories, key words searches included Frederick Law Olmsted (Olmsted dropped "Jr." from his name after his father's death in 1903), Frederick Law Olmsted, Jr., Olmsted Brothers, as well as specific Olmsted Brothers' projects in Southern California, a process which extracted information for initial resources. In California, investigation looked to major special collections as well as local libraries

adjacent to significant Olmsted Brothers' projects. East Coast research also looked to special collections in Boston near the firm's primary office such as Harvard University where the library's database cites the most literature on Frederick Law Olmsted, Jr. and is the repository for John Charles Olmsted's personal papers.

Due to the Olmsted Brothers opening of a second office in Palos Verdes, California, the Palos Verdes Peninsula Library, Local History Room, is a treasure trove of firm archives. The library's assemblage contains a vast collection of historic photographs from before Palos Verdes Estates was developed, through construction in the 1920s, to built projects in later decades. Original subdivision maps are also located there as well as published articles beginning in the early 20th century from local newspapers *Peninsula News*, *Daily Breeze* and *Los Angeles Times*. Additionally, the archives hold copies of the *Palos Verdes Bulletin*, a community newsletter which was published quarterly beginning in 1924.

The Bancroft Library at University of California, Berkeley is the state's primary special collections archives for environmental design. This library holds several collections which include correspondence from Frederick Law Olmsted, Jr. and his work in California. Two collections at the Bancroft, William Frederic Badè Papers and Frederick Law Olmsted Reports, are specific to the California state park survey with letters from Frederick Law Olmsted, Jr. during his 1928 work with the California State Park Commission as well as 1945 -1947 updates to this survey. A third collection, Frederick Law Olmsted, 1870-1957, holds his correspondence during his time spent in Washington, D.C. during development of the McMillan Plan. His 1910 - 1915 letters articulate the drafting of language for creation of the National Park Service as well as the politics of working with Gifford Pinchot, chief of the U.S. Forest Service and Olmsted, Jr.'s personal friend, dating from their collaboration on the construction of the Biltmore estate in Ashville, North Carolina (1889 - 1895). The Robert Underwood Johnson papers contain documents from Olmsted, Jr. regarding his opinion about the damming of the Hetch-Hetchy Valley, a continued modern controversy. The library's off-site collection at the Northern Regional Library Facility in nearby Richmond, California owns a copy of the 1944 *Shoreline Development Study*, a project which attempted to follow-up on construction of parts of the Los Angeles park and parkway plan proposed in 1930.¹

¹ See Greater Los Angeles Citizens' Committee, Carl C. McElvy, Ruth Patricia Shellhorn, and Henry Klumb, *Shoreline Development Study, Playa del Rey to Palos Verdes, a portion of a proposed Master Recreation Plan for the Greater Los Angeles Region* (Los Angeles, 1944).

Two Los Angeles archives have useful support materials. The Huntington Library in San Marino owns an original copy of *Parks, Playgrounds and Beaches* for careful study of the colored figures within the report. California State University, Dominguez Hills, Archives and Special Collections has primary documentation and imagery for the Los Angeles River and its flooding patterns in Gardena and Carson from 1914 and 1938, including Gardena Slough, where the Olmsted Brothers firm planned for a recreational water park as part of their Los Angeles park and parkway proposal.

The Regional History Collection at University of Southern California is considered to be one of the main resources for the study of Los Angeles and Southern California with notable photographic collections from the *Los Angeles Examiner*, the California Historical Society, and the “Dick” Whittington collection, though there was nothing specific to the Olmsted firm in these collections. Digital images of Los Angeles from the early 20th century are located at the Los Angeles Public Library, Central Los Angeles Branch, and the Santa Monica Public Library.

Most of the Olmsted Brothers’ job correspondence maintains business etiquette; therefore, in order to understand Olmsted, Jr. and his personal values, research focused on his published writings and his private correspondence with others, found within their archived papers. The special collections archives at the Frances Loeb Library, Harvard Graduate School of Design in Boston, provided additional primary materials. John Charles Olmsted’s personal papers are archived with some private letters between the brothers. This library also holds the personal papers for Arthur Shurcliff, a well-known landscape architect and long-time faculty member at Harvard’s School of Landscape Architecture. Shurcliff’s personal correspondence with Olmsted, Jr. is insightful for revealing more of Olmsted’s interests and ideals at the time.² In my personal interview with Boston-based independent scholar Elizabeth Hope Cushing, according to Cushing, Frederick Law Olmsted, Jr. reportedly burned his personal papers. Ms. Cushing is currently writing the first biography on Frederick Law Olmsted, Jr., and a source of information on Olmsted, Jr.’s personal life, with the project financially supported by Olmsted, Jr.’s grandson, Stephen Gill.

² See Olmsted Collection, Series C, D, & F, Correspondence to/from FLO, Sr., Correspondence to/from FLO, Jr., Correspondence to/from Olmsted family; and Olmsted Collection, Series B, Series C, 1-20, Correspondence to/from John C. Olmsted and Arthur N. Shurcliff and Sidney N. Shurcliff Papers, Series A and F, Special Collections, Frances Loeb Library, Graduate School of Design, Harvard University.

Outside of published city planning reports, Frederick Law Olmsted, Jr. published over 35 essays in professional journals from 1903 - 1947 which articulate his design approach and values for the landscape architecture profession. These essays provide invaluable personal and professional philosophies, and were often incorporated into subsequent reports. Professional essays substantiate Olmsted, Jr.'s approach to landscape architecture, but so, too, does his organization of the first landscape architecture curriculum at Harvard University in 1900 where he was a professor until 1914. Special Collections at the Frances Loeb Library contain the curricular structure of the program from its initiation including all coursework and faculty.³

Organization of primary resources


Focus on primary resources such as Olmsted Brothers' job correspondence, a cache that included over 20,000 letters just for their California work, combined with the firm's site plans, drawings, photographs and plant lists, required significant data organization for this to be useful for recall.⁴ In order to organize the letters, a database was developed in Filemaker Pro, a business inventory software that many visual historians are using to organize data and their attendant images. Rather than a running list of fields, tabs were created in order to divide the database into a logical layout, visible on a single computer screen, with tabs separated as Job Details, Synopsis of the Project, Plans + Correspondence, Construction + Status, and Notes for future research. Each piece of Olmsted Brothers correspondence was individually digitized, either scanned from microfilm or, in the course of multiple visits, photographed in person at the FLONHS in Massachusetts. These separate files were then combined into a single PDF which created an artificial set of page numbers in order to re-locate specific letters. This arrangement was critical as the letters were sometimes out of chronological sequence; however, the original document order within a file was maintained for accurate historic interpretation. Each group of documents were read and important quotes and details recorded in "Synopsis of the Project," noted by the PDF page number. Reading individual job correspondence, even those not located in Los

³ See Records of the Department of Landscape Architecture, 1901-1972, Curricula, Special Collections, Frances Loeb Library, Graduate School of Design, Harvard University.

⁴ For this thesis, in explanation of footnotes which reference written documents from job files, the Olmsted firm's job name and job number follow these quotes to clarify the location of these primary resources.

Angeles, was also important as discussion of a range of projects might be found within a single letter, the letter then filed under only one job number. Noted within my correspondence database were other projects discussed in order to find those outlier conversations and have them be searchable later (Figure 3.1).

In addition to the database, another organizational system was developed. To systematize large sets of high resolution plans and photographs, each California project had its own folder, named by job number. Within each job folder were separate folders for correspondence, plans, photos, and any other primary documentation from this project. The FLONHS provided free of charge any already-digitized plans, photos, or correspondence for all 204 projects which greatly aided gathering data. These two organizational frameworks, developed during the initial two years of study, were invaluable later when analyzing selected projects (Figure 3.2).

Job Details	Synopsis of Project	Plans + Correspondence	Construction + Status	Notes	
Job #	8086	Project Name	James Buchanan Residence	Client	James Buchanan
		Address	700 Via Somonte Palos Verdes		
		Designer from OB	George Gibbs		
		Architect	Kirtland Cutter		
		Developer			
		Contractors			
		Other Job #			
		Other Job Name			
		Design Date	1927		
		Other projects discussed			

Job Details	Synopsis of Project	Plans + Correspondence	Construction + Status	Notes
<p>Automobile Club engineer needs an alternative route to Wilshire Blvd., beginning at Arroyo Seco, crossing the river, running over to Silver Lake, down the draw in which to situate Bimini Baths, crossing Wilshire Blvd., below the Ambassador Hotel, following the draw to Pico Street, then into Santa Monica to Eighth Street. According to O'Melveny, problem is it is through Shanty Town. Doesn't want "super boulevard through such cheap surroundings and is not in accordance with the fitness of things." He doesn't think it would be a scenic boulevard this way.</p> <p>First letter is December 24, 1925 from O'Melveny. Interesting that the engineer would find the easiest route vs. the most picturesque. Design needs a better termination point. 3, "this plan is going to put in opposition to 'Palos Verdes Boulevard'—for that is the name I have given it, to myself." Traffic necessities may demand a kind of east-west cross town boulevard, with Pasadena having the Arroyo Seco on one end and the Wilshire District running to the east at the other, justifies a connecting link between them. 4, "Then of course to my mind the cost of labor and the time would be greatly in excess of the same elements in our Palos Verdes scheme" H.W. O'Melveny says he doesn't want to bring Cheney and Olmsted into the controversy but would like them to think this over to furnish arguments for the Palos Verdes project over the other.</p> <p>4, Met with Mr. Pomeroy at lunch at the City Club. Said they (WHO?) were anxious to get an idea of the cost for the preparation of the plans for the three parks and about eleven miles of parkways, 225 feet wide and about three miles of parkways 300 feet wide. Cheney needs plans in order to estimate the cost.</p> <p>6, offers new options for boulevards for O'Melveny. See his previous Major Street Plan. 7, How to work around placing the boulevard in a more expensive neighborhood because of issues with taxing low economic districts to pay for road. 8, choose PV Blvd because of what it offers and "its values": direct satisfaction for the public and beautiful scenery. 9, says his route is one of "scenic enjoyment" that takes you to the mountains, sea or parks. "The Palos Verdes Blvd. would not only reach the coast at an uncongested point, where a terminal park can be on open rolling land facing on an unspoiled beach as good as any along the whole coast, but would connect there with the Palos Verdes Coast Parkway and Park a park objective which is not hypothetical or problematical but already secured and the importance of which in any future park system in Los Angeles County has not yet begun to be appreciated...[speaking of the PV Blvd that is currently under construction] Nowhere else in Los Angeles County does any possibility remain of securing at what ever cost, so long a stretch of coastal park; nowhere else is the natural coastal scenery so picturesque; nowhere else can a coastal park be backed up consistently by a residential development of anything like the attractiveness which is assured for the Palos Verdes Hills by the thorough-going protective restrictions, the unified control and the methods of development there adopted. 10, "Any one who will seriously study the facts from the point of view of a metropolitan</p>				
		Other projects discussed	Major Traffic Street Plan, Palos Verdes, State Park Survey	

Figure 3.1: Image of database in Filemaker Pro. Image of the database developed in Filemaker Pro in order to organize project imagery and job correspondence.

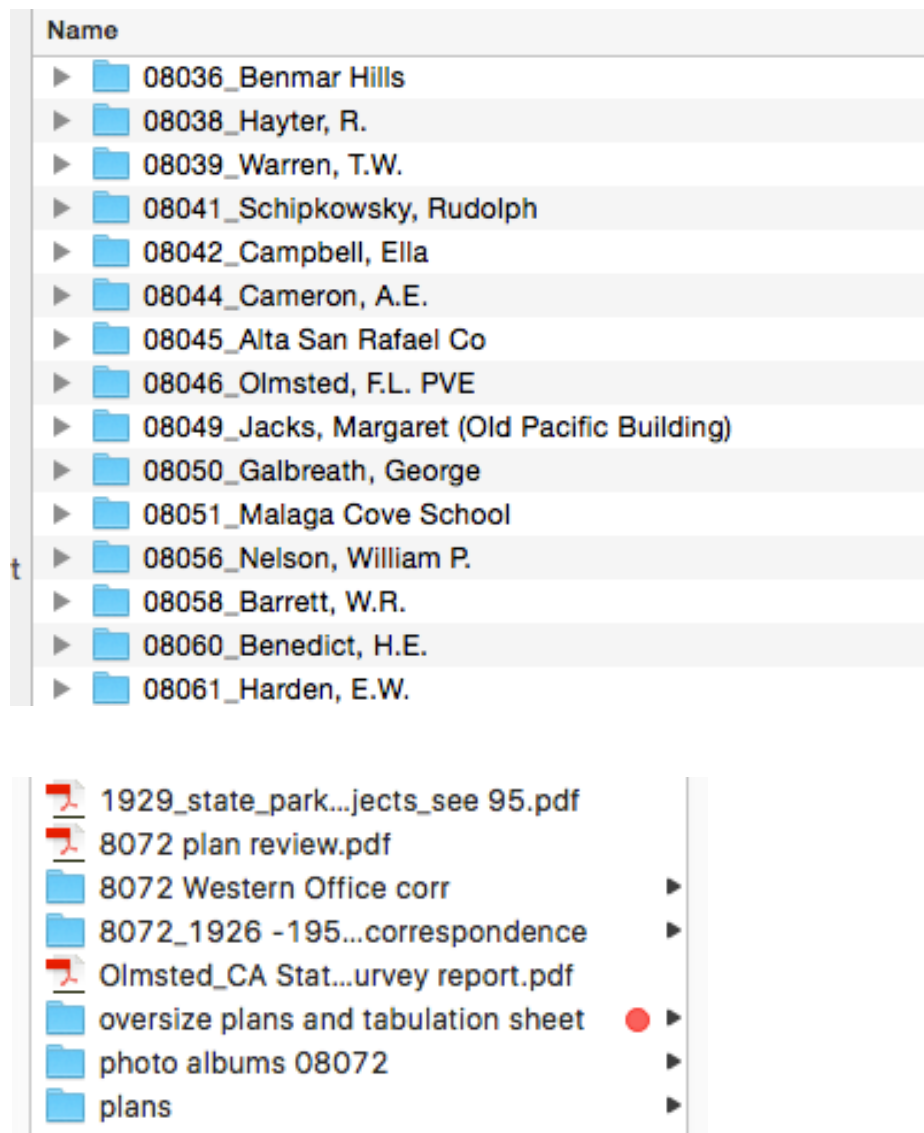


Figure 3.2: Image of folders created for each Olmsted firm job file in California. Each folder was then additionally organized with separate folders for plans, photos and correspondence

Analysis of source material

Unlike many historians, what is different about my approach to the source material is that I have been in private practice for over 25 years, specializing in sustainable landscape design, with over 200 design projects in Southern California. Landscape architecture uses technical language and specific plans which require not only an ability to clearly understand landscape construction, but the drawings themselves and what they mean. Planting plans listing botanical names, or grading and drainage drawings, for example, are sometimes described in the letters, but more often they need to be studied by scholars who are familiar with these plan types. Using my technical expertise, I examined the letters and reports through the lens of a landscape architect in order to discern key words, key ideas, and the techniques and design approach by the firm. I was also able to study the construction plans during this period, analyzing the choice of plant material and whether it was suitable to semi-aridity. Analysis of grading and drainage plans provided insights for how the firm would work with the existing hydrology. This analytical method helped provide new insights in the Olmsted Brothers projects than current published literature.

Having a background in landscape architecture also provided a shared vocabulary to understand the language in the Olmsted Brothers' letters and reports. Through this study, I found considerable differences between Frederick Law Olmsted, Jr.'s published reports and his unpublished job correspondence and plans, especially with regard to the role of science in his approach to design. Olmsted, Jr.'s reports were commissioned and written for a variety of audiences and the language within them was often for citizen groups and political leaders. Olmsted, Jr.'s lack of scientific detail within the reports, however, was found conclusively in a critical study of his correspondence and construction documents. With the technical understanding of landscape architecture project development, the plans and letters are rich in detailed information to support the assertion that the firm was practicing ecological design and planning as understood in current practice.

CASE STUDIES

After careful systematic review of the correspondence and construction documents, case studies with the richest amount of data and those which showcased a range of landscape types and planning methods, were selected for more comprehensive analysis. Furthermore, in order to discern the broad context and regional understanding of Los Angeles County as understood by the Olmsted Brothers, four case studies for this thesis focused on large themes: planned community design, infrastructure design, open space management, and watershed management. Each provided a different scale and landscape type.

Planned Community Design: Palos Verdes Estates (1914-1931)

The planned community of Palos Verdes Estates offered a rich case study due to the longevity of the firm's work on this project as well as firm principals' residence in the community. Completely designed prior to any infrastructure, the 16,000-acre site design represented the Olmsted firm's ideal Southern California community design, working with the cultural, political, and ecological influences of the period. Looking to other climatically similar regions provided the design framework to develop a new American typology that was distinctively Californian. Along with developer Frank Vanderlip, city planner Charles Cheney and architect Myron Hunt, the Olmsted Brothers' design of Palos Verdes represented the paradigm of an American expression of Mediterranean design and an early sustainable response in California. Unique amongst Olmsted projects was that Frederick Law Olmsted, Jr. and principal James Frederick Dawson were required to live in the community while it was under construction. For more than eight years, both Olmsted, Jr. and Dawson spent at least 6 months in full-time residence in Palos Verdes, making them community members as well as the designers. They were the tastemakers who also developed the design guidelines to politically control the aesthetics and values of the community.

Olmsted Brothers' job correspondence included not only the design infrastructure of the community, such as early research on plants, soils, wind and water patterns, as well as road and village development, but there was also significant additional correspondence

and plans for Palos Verdes' schools, commercial spaces, parks, golf courses, and private homes designed by the firm during the 1920s.⁵

Infrastructure Design: Los Angeles Parkways (1924-1930)

While Palos Verdes was a private community design, firm projects were also firmly rooted in the public realm. In 1925, the newly passed Mattoon Act provided for acquisition and improvement of landscapes within all "public ways," including highways and parks. In response to this act, the Olmsted Brothers firm was hired to design a series of parkways in Los Angeles County between 1925 - 1930 and furthered an opportunity to design innovative infrastructure for the region. From Palos Verdes Parkway, to the Hollywood-Palos Verdes Parkway and its connector, Angeles-Mesa Parkway, the firm's series of proposed roadways not only linked the county, but the parkways' function also spoke to the era.

The Olmsted Brothers' "pleasureway parks" were intended for a scenic automobile drive, screening the urban and suburban surroundings, while creating local points of interest of regional character. At the same time, these roadways could also be "flood channel parkways" following natural drainage courses, capable of adapting to the predictable cycle of flood and drought. The Olmsted Brothers' designs mediated engineering challenges of stormwater management with the economic interests of rampant land speculation, providing cohesion for both urban and suburban areas. The parkway designs integrated infrastructure with the regional ecology, while exposing local politics and cultural mores.

Open Space Management: *Report of State Parks Survey of California* (1928-1929)

Frederick Law Olmsted, Jr.'s *Report of State Parks Survey of California*, was developed over 1928 -1929. Through 1927 legislative action, a California State Park Commission was created with one of its first acts to hire Olmsted, Jr. to conduct a state-wide survey of recommended sites to potentially become state parks. Olmsted, Jr. wrote in the report that his intent was to "determine which lands are suitable and desirable for the

⁵ See Appendix 1 for list of Palos Verdes projects.

ultimate development of a comprehensive, well-balanced state park system...[but also] to define a relation of such as system to other means of conserving and utilizing the scenic and recreational resources of the State.”⁶ A group of volunteer regional reporters and advisory groups assisted Olmsted, Jr., ultimately recommending over 330 subject sites throughout the state of California. Early intervention of preserving what the advisors considered the most pristine areas of the state was an opportunity to reserve lands in perpetuity for public domain. This report provided policy in environmental design guidelines for open space, many of which were adopted and continue to be maintained by staff within California State Parks.

Watershed Plan: Parks, Playgrounds and Beaches for the Los Angeles Region (1929-1930)

The final case study, a report written as a proposal for a comprehensive park and parkway system, *Parks, Playgrounds and Beaches for the Los Angeles Region*, bookended the beginning case study and was a summative project of the firm’s Southern California practice. The report’s proposal encompassed 1500 square miles and was collaboratively produced by the Olmsted Brothers and planning firm Bartholomew and Associates.⁷ This master plan built on the Olmsted firm’s previous work to manage water systems, open space, infrastructure, and community designs at a watershed scale. Intended to ensure multifunctional landscape design, elements such as pleasureway parks adjacent and within the river channels added transportation infrastructure, but could be closed during storm events, solving ecological issues of maintaining the natural hydrological patterns for the Los Angeles, Rio Hondo, and San Gabriel Rivers, whose flooding devastated the county every five to ten years.

Some of the parks within this design served special ecological purposes: Tujunga, Pacoima, and San Gabriel Wash, for example, were important drainage basins for the rivers. These “parks” were to be set aside for recreation and allowed to flood where the rivers naturally drained. Del Rey marshes and Bolsa Chica, both located between the ocean and

⁶ Frederick Law Olmsted, Jr., *Report of State Parks Survey of California* (Sacramento: Sacramento State Printing Office, 1929), 1.

⁷ Olmsted Brothers and Bartholomew and Associates, *Parks, Playgrounds and Beaches for the Los Angeles Region* (Los Angeles: Citizens’ Committee on Parks, Playgrounds and Beaches, 1930).

the outlets of the rivers, provided recreation, habitat, and mitigated flooding prior to flowing into the Pacific Ocean. This comprehensive green infrastructure design provided parks and playgrounds throughout the county, redefining beaches as green spaces. Mountains, canyons, deserts, and islands were an extension of the park system with the design functioning in both dry and inundated flood conditions. The proposal would utilize the long-term Los Angeles design expertise by the firm, simultaneously solving an ecological problem while aesthetically improving the city. It was a forward-thinking park system design at a regional scale, which for political reasons, was never built.

Collectively, these case studies provided the widest frame for analysis of firm projects which would begin to address insight to ongoing current concerns such as water management, sustainable urban planning, and hybridized, multifunctional landscapes.

CHAPTER 4

THE OLMSTED FIRM IN CALIFORNIA

I need not say that the great puzzle of our profession for the future, for your period, is going to be how to deal satisfactorily with the difficulties of the more arid parts of our continent...It is not improbable that the principle [sic] field for originality in our profession for what may be called a new school of L.A. [landscape architecture], will be found in the future...¹

Frederick Law Olmsted, Sr., 1895

Writing from the Biltmore grounds during the last weeks of his own practice in 1895, Frederick Law Olmsted, Sr. shared his vision with his son, advising that the future of their firm would be in developing a new and original landscape style that would deal with the problems of the arid West.² In an era of debate about water management and conservation of natural resources, Olmsted, Sr. foresaw the enormous pressures for growth in the West and anticipated that an advancement in landscape architecture theory and practice would require different models from those developed across other parts of the

¹ Frederick Law Olmsted, Sr. to Frederick Law Olmsted, Jr., Letter, 1 August 1895, Frederick Law Olmsted Papers, Library of Congress.

² Charles Beveridge, "Regionalism in Frederick Law Olmsted's Social Thought and Landscape Design Practice," In *Regional Garden Design in the United States*, eds. Therese O'Malley and Marc Treib (Washington, D.C.: Dumbarton Oaks Research Library and Collection, 1995), 231.

country with year-round precipitation. Regardless of locale, the Olmsted firm consistently applied design typologies such as park and parkway systems, suburban community designs, and city improvement projects, yet for California, those designed landscapes would require a shift in their practice because of the difference in climate.

Frederick Law Olmsted, Sr. retired from the firm in 1896, and in 1898 his stepson John Charles Olmsted and son Frederick Law Olmsted, Jr. permanently changed the firm name to the Olmsted Brothers.³ By 1911, the firm had divided projects regionally, with Olmsted, Jr. and principal Percival Gallagher overseeing work on the East Coast, and John Charles and principal Fred Dawson primarily working on the Pacific Coast, in the South, and Midwest.⁴ Despite this division of work, the two brothers typically collaborated on designs up to John Charles' death in 1920.⁵

THE OLMSTED BROTHERS' FIRM PRINCIPALS IN CALIFORNIA

The Olmsted Brothers' principals for California projects were John Charles Olmsted, Frederick Law Olmsted, Jr. and James Frederick Dawson. A brief introduction to the main designers in the Western practice provides context for some of their design decisions and pressures to advance regionalism in landscape architecture.

John Charles Olmsted (1852 - 1920)

John Charles Olmsted was born in 1852 to Dr. John Hull Olmsted and Mary Cleveland Perkins. When his father died of tuberculosis in 1857, his then-uncle, Frederick Law Olmsted, Sr. married his mother, ensuring the care of his brother's family, thus introducing John Charles to the field of landscape architecture. Olmsted, Sr.'s work brought the family to California for the first time in 1863 where he managed a frontier gold-mining operation in Mariposa, California, a town in the redwoods of the Sierra Nevada mountain range. According to John Charles' biographer, Arleyn Levee, it was this initial exposure to

³ When Olmsted, Sr. died in 1903, Frederick Law Olmsted dropped "Jr." from his name, which has caused consistent confusion in the literature, with scholars often referencing the father when in fact it was during Olmsted, Jr.'s era.

⁴ John Charles to F.H. Buhl, Letter, 30 August 1911, [Sharon Park, PA], #5386 O.A. Papers.

⁵ Letters between Olmsted Jr. on the East Coast and John Charles on the West Coast show a clear collaboration in their designs. As an example, see letters 14 November 1910 and 1 December 1910 between the two brothers from [Panama-California Exposition], #4051, O.A. Papers.

the wilderness that taught John to read the landscape by its flora and fauna. In the summers of 1869 and 1871 John Charles was a member of the Clarence King survey party in Nevada along the 40th Parallel where he developed a visual memory, recording the topography, geology, and botany in the landscape.⁶ When John Charles was later made partner with his stepfather in 1884, the firm name became F.L. + J.C. Olmsted.

John Charles' reputation was one of solving complex design issues with "artistry and practicality" while protecting the natural features of the site and, like Olmsted, Sr., he was committed to educating communities and clients about the long-term benefits of careful, comprehensive planning.⁷ A common strategy was to acquire as much land as possible to develop a cohesive design, which preserved land while fulfilling the functional requirements of the project. This was especially true in his city and park system designs where John Charles continued the planning begun by his stepfather in Boston, Buffalo, Detroit, Rochester, Hartford, Louisville, Brooklyn, and Chicago with new West Coast projects in Portland, Seattle and Spokane.⁸ Concerned with appropriateness in all aspects of design, John Charles worked collaboratively with architects on projects, urging them to better accommodate the building to its site and respond to vistas in a picturesque aesthetic. Though he published few articles in his lifetime, Levee argues that his comprehensive philosophy of design was "reflective of the aesthetic tenets of his stepfather, yet responsive to new social, economic and political demands of the 20th Century."⁹

Frederick Law Olmsted, Jr. (1870 - 1957)

Eighteen years younger than his brother, Frederick Law Olmsted, Jr. literally grew up in the firm office, as the Olmsted home and practice were in the same buildings. Olmsted, Jr.'s aesthetic preference and philosophical approach to design in many ways mirrored his father and brother with a deep concern for land conservation. A requirement to all projects was a site visit, which eliminated designing merely from a map. Thus,

⁶ Arleyn Levee, "John Charles Olmsted," In *Pioneers of American Landscape Design*, eds. Charles Birnbaum and Robin Karson (New York: McGraw-Hill Companies, Inc., 2000), 282-285.

⁷ Levee, "John Charles Olmsted," 282.

⁸ Levee, "John Charles Olmsted," 283.

⁹ Ibid.

Olmsted, Jr. was taught to methodologically begin a project by understanding site context and ecological qualities such as topography, geologic foundations, soils, and existing plants. His love and respect for nature was not only for its sensual effects, but he understood as a planner the long-term effects of landscape alteration.

Born on Staten Island, New York, Olmsted, Jr. was the fourth of five children in his blended family. From his earliest years, he was aware of his father's desire to have him carry on the family name and profession, with Olmsted, Sr. changing his son's name at age four—from "Henry Perkins"—to make his only biological son his namesake. Olmsted, Sr. also developed a specialized education program for his son at Harvard University, one that would prepare him to become a landscape architect, studying botany, architecture, engineering, and art. In a poignant 1890 letter from father to son, Olmsted, Sr. wrote of his high expectations for his son in continuing the father's work and reputation:

My life is pretty nearly run out. At the best I shall be disabled from all business long before you are to enter upon it. I wish that it were otherwise so far that your professional education could proceed in association with my actual work as John's has, and Eliot's, Codman's and Collidge's. As that cannot be reckoned upon, it is a consolation that you must have acquired a good deal of knowledge of my principles and methods unconsciously, and it is to be hoped that you will henceforth be much more than you have been in an attitude of interest and intelligence to take in more. I want you to keep up a certain regular methodical reading and thinking on the subject, I will say at least five hours a week. I reckon that in four years you would thus have read everything not ephemeral in English, French & German & would be the best read man as to this Art in the world. I want you at the same time to keep such knowledge of what is going in our office that you will gradually be led to an understanding of practice in relation to theory and of theory in relation to practice. What I want now is that you adopt this wish of mine and let it enter into your plans and expectations and habits, in the same way that the cut and dried requirements of the college course will enter into them....Another foundation of my wish is the modest pride and satisfaction I have in what, against great difficulties, I have accomplished in—if not elevating the art & profession of L.A. at least in contending for a much higher standard than could but for what I have done, have been maintained. I feel that I have been rather grandly successful in this respect, and yet only successful in holding the fort as it were...I want you to be prepared to be a leader of the van. How much abler should I have been had I had your education, to this time of your education. How much more had I had that education that you may have ten years hence...Now in nearly all our work I am thinking of the credit that

will indirectly come to you. How will it as a mature work of the Olmsted school affect Rick? I ask. And then, with reference to your education, How is Rick to be best prepared to take advantage of what in reputation I have been earning?—Reputation coming as the result of what I shall have done, but not coming in my time. How best prepared to carry on the war against vulgarity and continued further & successfully against ignorance & prejudice & meanness. How best to make L.A. respected as an Art & a liberal profession.¹⁰

Upon graduating *magna cum laude* in 1894, Olmsted, Jr. spent 13 months with his father at the Biltmore site in Ashville, North Carolina, and then officially entered the Olmsted firm in December 1895, a year before his father's retirement.

By the late 19th century, there was a strong desire by practitioners to professionalize the field of landscape architecture. Along with his brother John Charles and nine other leading landscape architects, the group organized the American Society of Landscape Architects (ASLA). Writing about the 1899 formation of the organization, Melanie Simo suggests development of the ASLA was representative of the time:

The emerging Progressive Era was significant not only for a surging interest in social and political reforms, "trust-busting," and natural-resource conservation, but also for the rise of a new major player in the life of the nation—the professional. This was an expert, someone presumably above the fray of politics who could be expected to act from motives higher than self-interest or mere profit.¹¹

Professionalization of the discipline coincided with the need for a formalized education. In 1900, Frederick Law Olmsted, Jr. organized the first landscape architecture curriculum at Harvard University. Through this program, Olmsted, Jr. defined the field of landscape architecture and what he deemed its central academic disciplines, with his program setting the direction of the field for the next 30 years.¹² Coursework was broad

¹⁰ Frederick Law Olmsted, Sr. to Frederick Law Olmsted, Jr., Letter, 5 September 1890, In *The Papers of Frederick Law Olmsted: The Last Great Projects, 1890-1895*, eds. David Schuyler and Gregory Kaliss (Baltimore: John Hopkins University Press, 2015), 200-204. Frederick Law Olmsted, Jr. was called Rick by his close friends and family.

¹¹ Melanie Simo, *100 Years of Landscape Architecture: Some Patterns of a Century* (Washington, D.C.: Spacemaker Press, 1999), 23.

¹² For a comprehensive discussion of the evolution of the landscape architecture program at Harvard University see Melanie Simo's *The Coalescing of Different Forces and Ideas: A History of Landscape Architecture at Harvard, 1900-1999* (Cambridge: The Harvard University Graduate School of Design, 2000.)

and interdisciplinary with liberal amounts of science, civil and sanitation engineering, and other technical studies, but also the humanities with art and literature. Recognizing the importance of transportation infrastructure design in landscape architecture practice, Road Making and Maintenance taught how to design roads for commercial and “pleasure purposes.” In studying literature, Olmsted, Jr. included his champions: John Ruskin and Humphry Repton for aesthetics, the environmental philosophy of Henry David Thoreau, and the writings of naturalist John Burroughs.

In the 1916 Harvard catalog, the profession of landscape architecture was described in words that both echo Olmsted, Sr. with revised 20th century interpretations of the discipline:

Landscape architecture is primarily a fine art, and as such its most important function is to create and preserve beauty in the adaptation of land to human service, whether in cities or in the broader natural scenery of the country. In its relation to the location of buildings and the treatment of their surroundings it requires a familiarity with certain parts of the technical field of architecture; but its materials are mainly included within the fields of geology, forestry, horticulture, and civil engineering, to which it is related in much the same manner that architecture is related to structural engineering and other similar technical subjects.

With the widespread general realization of our need for beauty in land adapted to our use—beauty not merely as a luxury but as a practical necessity and as a matter of course—has become a constantly growing demand for men professionally trained in the production of this beauty. There is now in this country a large opportunity for trained men as assistants in the offices of landscape architects, as park superintendents, city foresters, etc., and as landscape architects in private practice or public employ.¹³

Olmsted, Jr. later wrote, “a broadly experienced landscape architect can unite in his own person the points of view of a civil engineer, of an artist and of a gardener, and to some degree those of geologist, ecologist and geographer.”¹⁴ Four years of academic study followed by at least two or three years of practical experience, he argued, would make the

¹³“Instruction in Landscape Architecture, 1915-1916, Harvard University and Lawrence Scientific School,” *Official Register of Harvard University* XII, no. 3, Part 3, Cambridge, MA: December 28, 1915, 9.

¹⁴ Simo, *The Coalescing of Different Forces and Ideas*, 10.

student a “useful assistant to a landscape architect.”¹⁵ Undoubtedly Olmsted, Jr. felt the discipline was complicated, believing a student could only begin to understand its complexity after five to seven years of education and practice.

Upon his brother’s death in 1920, Olmsted, Jr. became the senior partner in the Olmsted firm, and maintained the Olmsted Brothers’ name “both for sentimental and business reasons, believing that the many changes in the name of the Olmsted office in the past were rather unfortunate” in preserving the firm’s historical identity.¹⁶ It was after this period, too, that Olmsted, Jr. began a long residency in California (1924 - 1931 and 1951 - 1957¹⁷) and his prolific number of projects in the state developed into a life-long appreciation for the California landscape. From his home in Palos Verdes, he prepared a guide for the selection and acquisition of land for the California park system in 1928 that became a model for other states. For nearly 30 years, 1928 - 1956, Olmsted, Jr. served as a member of a Committee of Experts to advise on plans and policies relating to Yosemite National Park. As a preeminent practitioner and spokesman for the profession of landscape architecture and comprehensive planning, he sought to balance the relationship of people and their environment, often looking for distinctive solutions in the arid West.

James Frederick Dawson (1874 - 1941)

The influences of Fred Dawson’s contributions have attracted little scholarship by historians.¹⁸ Spending his entire career working for the Olmsted firm and becoming a full partner with the firm in 1922, Dawson was principally responsible for their West Coast designs, and was their resident expert in horticulture. His expansive experience included private gardens; public parks and park systems such as Portland, Oregon, Seattle and

¹⁵“Instruction in Landscape Architecture, 1915-1916,” 11.

¹⁶ See Susan L. Klaus in “All in the Family: the Olmsted Office and the Business of Landscape Architecture” *Landscape Journal* 16, no. 1 (Spring 1997), referencing Olmsted, Jr. to Arthur C. Comey, Letter, 24 March 1920, Job #20-(3), O.A. Papers.

¹⁷ Olmsted, Jr. lived at 2101 Rosita Place, Palos Verdes Estates from 1924-1931 and 2303 Middlefield Road, Palo Alto from 1951-1957.

¹⁸ See Catherine Joy Johnson “The Olmsted Designs for Washington Park Arboretum,” *Washington Park Arboretum Bulletin* 5, no. 1 (1989); “Olmsted in the Pacific Northwest: Catherine Joy Johnson, “Private Estates and Residential Communities,” *Friends of Seattle’s Olmsted Parks*, 1997; Catherine Joy Johnson, “James Frederick Dawson,” In *Pioneers of American Landscape Design*, eds. Charles Birnbaum and Robin Karson (New York: McGraw-Hill Companies, Inc., 2000), 36-38.

Spokane, Washington; residential communities like St. Francis Wood in San Francisco, the Broadmoor in Colorado Springs and Palos Verdes Estates; as well as colleges and state capitol buildings.¹⁹ He closely collaborated with John Charles on both the respective 1909 and 1911 Seattle and San Diego Expositions, and helped establish the Olmsted Brothers' West Coast Office. John Charles once commented:

Mr. J. Fred Dawson...has...been making professional trips to the Pacific Coast, sometimes part of the time with me and very generally looking after the same works, but gradually taking up more and more professional works which I have not visited and taking more and more complete charge even of most of those with which I was personally connected. He has evidently given entire satisfaction to nearly all....so that I have of late years withdrawn as much as I could from undertaking work in that region, leaving our interests there to be cared for by Mr. Dawson.²⁰

Born in Cambridge, Massachusetts, Dawson joined a family of horticulturalists including his father Jackson Thornton Dawson, the Superintendent of Boston's Arnold Arboretum for over 40 years. He attended Harvard's Bussey Institute for studies related to landscape architecture until 1896, when he entered the office of Olmsted, Olmsted, & Eliot. According to his biographer Catherine Joy Johnson, from 1896 - 1904 he spent extended periods in Europe as part of his apprenticeship to document plant materials and landscapes with his work showing the influence of Italian and French formal design.²¹

Fred Dawson was a leader in site-specific design, responsible for directing much of the in-depth ecological research at Palos Verdes where he studied its climate, topography, and native plants. Ultimately, he worked on the Palos Verdes project from 1913 - 1935, longer than any other member of the firm, always loyally coordinating his firm's values with the teams of architects, planners, and community members.

NEW APPROACHES TO REGIONAL DESIGN IN CALIFORNIA

Through the writings of landscape gardener Andrew Jackson Downing in the 1840s, Americans were introduced to the idea of "fitness" in landscape design, with Downing

¹⁹ Boston Chapter ASLA, "James Frederick Dawson: A biographical minute on his professional life and work," *Landscape Architecture* 32, no. 1 (1941): 1-2.

²⁰ John Charles to Jay Lawyer, Letter, 19 December 1913, [Palos Verdes], #5950, O.A. Papers.

²¹ Johnson, "James Frederick Dawson," 38.

providing models in which residential and grounds' designs complemented each other.²² However, the definition of "fitness" by Downing was different than the one espoused by Frederick Law Olmsted, Sr. For Olmsted, Sr., "fitness" meant designing the architecture and landscape architecture *suited to the site*, not just to each other, an early ecological design response. Olmsted, Sr.'s 1865 design proposal for Mountain View Cemetery in Oakland, California was the firm's first California project. The design highlighted his stance on regionalism and modeled a new approach to design-thinking, especially with regard to water.

Radical departures in Northern California, 1865 - 1886

Like other American cities in the latter part of the 19th Century, Oakland, California in 1863 was confronted with problems of providing clean water, light and power, transportation, and parks. A thriving center of trade and commerce, the city had outgrown its two small, unsightly graveyards in the center of town. California had passed a Rural Cemetery Act in 1859, and in the tradition of Boston's Mount Auburn, Oakland's professional leaders and businessmen resolved to establish a garden cemetery in the nearby countryside. They bought land two miles north of town, incorporated a Cemetery Association, and named the site "Mountain View." By September 1864, the cemetery trustees ordered a topographical survey to be sent to Frederick Law Olmsted, Sr., with his design response related in a March 30, 1865 meeting.²³

Frederick Law Olmsted, Sr. had carefully studied the Bay Area's dry summer landscape and the site's topography. While drawing ideas from Eastern cemeteries he admired, Olmsted, Sr. wanted his design to be a fresh approach that captured the region and wrote in his *Report of Mr. Olmsted to Major R.W. Kirkham*:

The success of those who have undertaken a similar duty for communities in our Atlantic States, where solemn groves and sheltered glades abound, and where turf forms naturally over all the soil which is not shaded by foliage, is mainly due to a judicious

²² Robin Karson, *The Muses of Gwinn: Art and Nature in a Garden designed by Warren Manning, Charles A. Platt and Ellen Biddle Shipman* (Sagaponack, NY: Sagapress, 1995), 114.

²³ Gaye Lenihan, "Mountain View Cemetery: 1863-1906," *Oakland Heritage Alliance News* 7, no. 2 (1987): 2-7.

selection of ground at the outset. Ground similarly suitable for the purpose does not exist in the vicinity of San Francisco. Here there is no Cypress Hill, or Laurel Hill, or Greenwood or Spring Grove, to be appropriated.

You must then look to an entirely different way of accomplishing the end in view, and to entirely different measures from those made use of in the East; or you must undertake, as a preliminary duty, the formation, by art, of a groundwork similar to that which Nature offers ready-made, to those who look for it at the East.²⁴

Olmsted, Sr. objected to the artificiality of simply mimicking design from other regions such as England or the Atlantic coast, vastly different ecologies in soils, climate, and rainfall. For Oakland, he recommended Italian cypress, Cedar of Lebanon, stone pine, Monterey pine, and native oak as the few species that would survive the windy site, have low water needs, and be symbolically representative within a burial ground. With headstones laid flat, the use of lawn heavily characterized his plan as an organizational feature that brought unity and visual coherence to the cemetery. The lawns at Mountain View Cemetery, however, would not resemble turf lawns in other locales due to the region's low rainfall. Olmsted, Sr. wrote,

By a very abundant use of artificial means of watering the [ground], it might be possible for you to follow after the same ideal that has been had in view by these who laid out the best Eastern Cemeteries. But the capital, the skill, and the constant expense for labor which would be required to secure even an approach to the beauty, convenience and *fitness* of these grounds for their purpose, would be incalculably larger in your case, and the result, after all, would be satisfactory as a triumph of art over difficulties, rather than for its intrinsic beauty and *fitness*.²⁵

Olmsted, Sr.'s design used the un-irrigated, native grass landscape, coupled with Mediterranean-based trees suited to the conditions, to develop his new approach to "rural cemetery" design in California. His design was an attempt to provide one of both "fitness

²⁴ Frederick Law Olmsted, Sr., *Report of Mr. Olmsted to Major R.W. Kirkham*, unpublished, 1865, 1.

²⁵ Olmsted, Sr., *Report to Kirkham*, 3. Note the italics of "fitness" is by this author to emphasize Olmsted, Sr.'s adamancy that the design match with the regional ecology.

and becoming your purpose” for Oakland and was in keeping with his concerns about regional design and the major issue of water use in the American West.²⁶

While many in the late 19th century looked to regional design as patriotic in breaking from European models, there were only a handful of practitioners interested in regionalism as ecological design. Under the design supervision of William Hammond Hall, Golden Gate Park in San Francisco began construction in 1870. David Streatfield’s essay “The Evolution of the California Landscape” describes Hall’s dunes stabilization as “the most important park design in the 19th Century which exemplifies the application of ecological concepts to design,” as the difficult conditions of the landscape required a new approach to the park implementation. Olmsted, Sr.’s design for a system of pleasure parks in San Francisco was equally radical. Olmsted, Sr. rejected the idea of a pastoral park in the city and proposed instead a series of public spaces linked by a sunken “promenade” for pedestrians, carriages and equestrians, 20 feet deep and 50 yards wide, running from the harbor to a point four miles inland. The steep slopes were planted heavily with drought-tolerant shrubs and could be watered when needed by fire hydrants along the top edge. Unfortunately, this vision of new park design in 1866 was too revolutionary for San Franciscans and it was completely rejected.²⁷

Two decades later, in the design of the Stanford University campus, former California governor Leland Stanford and his wife Jane commissioned Olmsted, Sr. to design a new university on the grounds of their Palo Alto ranch to honor their only son who had died at age 16. Mr. and Mrs. Stanford not only wanted to develop a great university, but integrate and adapt its design to the unique conditions of the West Coast.²⁸ Olmsted, Sr. arrived at the ranch in the fall of 1886, along with his partner H.S. Codman and his son Frederick Law Olmsted, Jr., and recommended site selection on the foothills where there was a commanding view of the bay and mountains. In a letter to Leland Stanford in

²⁶ Olmsted, Sr. designed the initial plan for Mountain View Cemetery. However, between 1938-1947 the Olmsted Brothers were contacted as consultants to expand the cemetery and add onto their father’s original design. Plans reflect new grading for additional roads such as at Plot 68, where perhaps in 1865, it was too steep for carriages. Only with the advent of the automobile were the previously undeveloped roads made usable. The new design in the 1940s fluidly connected with the original plan, allowing further development of the cemetery. See [Mountain View Cemetery], #9685, O.A. Papers.

²⁷ David Streatfield, “The Evolution of the California Landscape,” *Landscape Architecture* 66, no. 2 (March 1976): 117-125.

²⁸ Diane Kostial McGuire, “Early Site Planning on the West Coast: Frederick Law Olmsted’s Plan for Stanford University,” *Landscape Architecture* 47 (January 1957): 344.

November 1886, Olmsted, Sr. explained his design principles for the project. He observed that people generally desired to duplicate what they were accustomed to, especially when it came to designing new communities, but that this new region required adaptation to an entirely new climate. Explaining to Mr. Stanford, Olmsted, Sr. argued that one must not look to Oxford and Cambridge and duplicate them, but instead look to Syria, Greece, Italy, and Spain, where the climate was similar (Figure 4.1, Figure 4.2 and Figure 4.3).²⁹

As Olmsted, Sr. developed theories for landscape architecture, he drew from Alexander Pope, who advocated that *genius loci*, or a sense of place, was a key tenet to matching design to the site. Adding to this sense of place, regionalism was central to Olmsted, Sr. and was extended in his children's work. While native plants were not of particular concern to the elder Olmsted, by the early 20th century, arboretums and on-site nurseries were commonplace in Olmsted Brothers' projects as not only creating a sense of fitness in the existing landscape, but the plants also worked in conjunction with the climate of the particular setting. The father's 19th century practice of adapting landscape design to regional climates, both on the East and West Coasts, contributed to the approach the Olmsted Brothers would bring to their work in Southern California.

²⁹ McGuire, "Stanford University," 346.



Figure 4.1: The Leland Stanford Jr. University/General Plan/; Scale 500'=1", Shepley, Rutan & Collidge Archts, n.d. Stanford University and its siting within larger context of the landscape. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site



Figure 4.2: Shepley Rutan & Coolidge photo lithograph of Perspective View, 1889. Aerial view of campus, its axial layout, and Mediterranean architecture. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

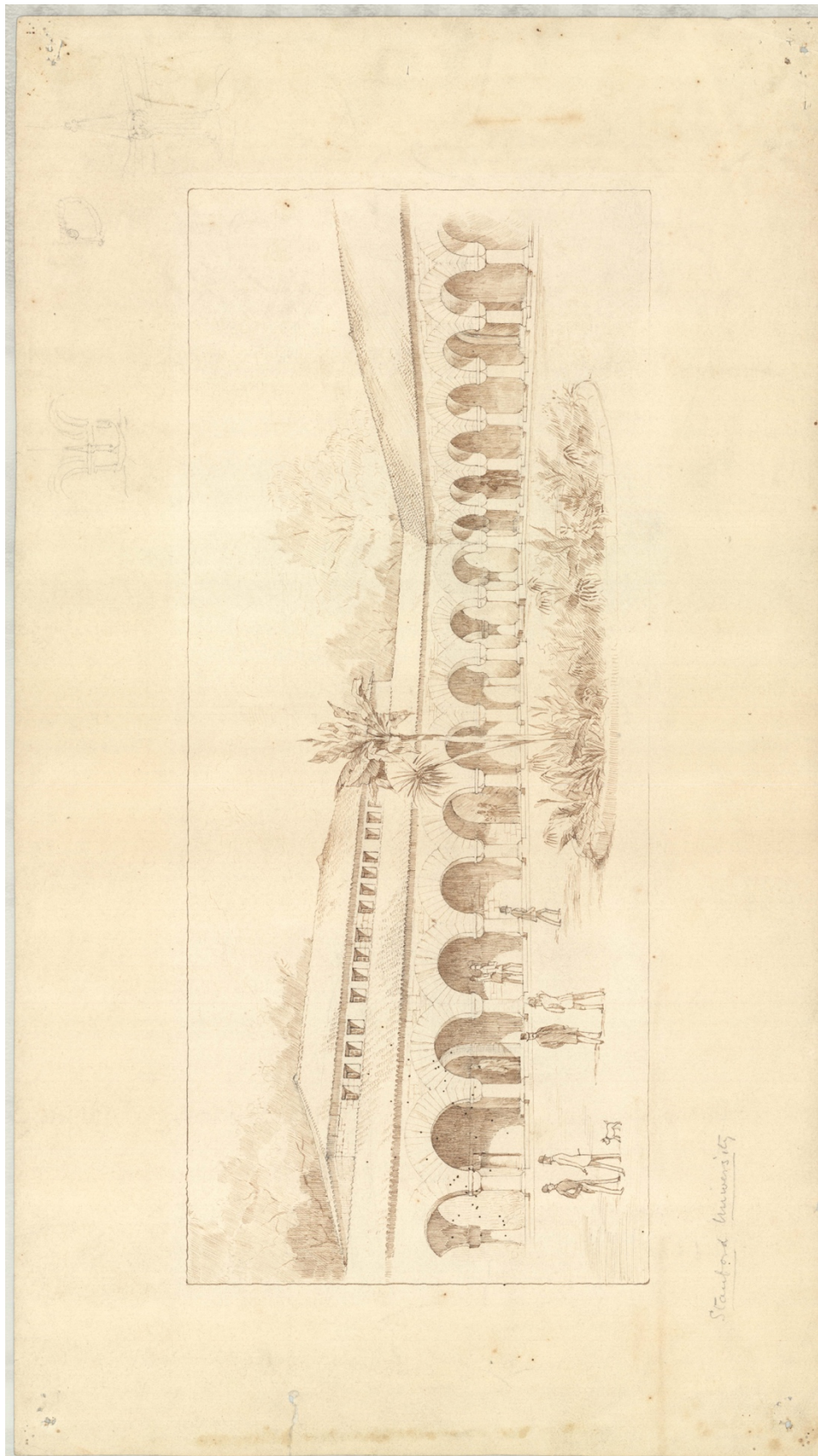


Figure 4.3: Sketch of Interior Quadrangle Gov. Stanford and Chapel Corridor, n.d. Sketch shows the minimization of plants and elimination of turf in interior quadrangle in response to the low-water climate at Stanford. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

Creative use of water in Southern California, 1903

Olmsted, Sr.'s seminal work in California greatly affected his sons and their approach to design in the region with John Charles and Olmsted, Jr. continuing their father's definition of fitness. The Olmsted Brothers would both borrow ideas from their father, but also test new ways of designing with the even greater aridity of Southern California.

The Olmsted Brothers' first foray into design in Southern California occurred in 1903 at Santa Catalina Island, a small island, 29 miles west of Long Beach, and their first project that lacked access to supplemental water. The Banning Brothers of the Santa Catalina Island Company were establishing a resort similar to the neighboring city of Avalon, but wanting one more elaborate, requested a report for a complete improvement plan of the landscape and roads. Originally writing to Olmsted, Sr., now no longer in practice, John Charles answered their letter and, in April, traveled to Catalina Island for a site review. There he noted its topography, flora and fauna, the width and grade of existing roads, and the valley and coastline views. John Charles made a three-day inspection, and though his scientific study was limited, his report reflected an appreciation for the native landscape and ways to reduce water use in the landscape. To help acclimate to the new region, John Charles acquired books on this trip to discern the local vegetation, and for the first time used a Spanish translation of geographical terms in his report.³⁰

Through John Charles' 40-page report to the Banning Brothers, his recommendations showed design both particular to the site but also maintained the firm's picturesque aesthetic response. Architecture was to have a "markedly picturesque style in harmony with the topography," he wrote, with cottages "nestled" into the slopes. Responsive to the island's steep topography, the grid layout of streets was ridiculed as "very absurd" for the site; rather, use of curvilinear roads would make the cottages "sit differently along the curving drives." Careful grading for roads, therefore, would be required to reduce ugly cuts in adaptation to the contours of the land.³¹

³⁰ It should be noted that none of the Olmsteds spoke Spanish, but used Spanish names to create regional identity at Stanford, Panama-California Exposition, and Palos Verdes Estates to name the roads, structures and city centers.

³¹ John Charles, Site visit notes, 9 April 1903, [Santa Catalina], #2394, O.A. Papers.

While John Charles' proposed pleasure ground or park "planted with shade trees and ornamental shrubbery and flowers together with little sheltered seats, rustic stone terraces, outlook balconies" was predictably aligned with established Olmstedian ideas, the creative use of water was arguably the most regional and far-sighted recommendation. Continuing his discussion of the pleasure grounds he wrote, "Of course it will be necessary to irrigate the plantations in order to make a success of them. No doubt there are a number of interesting plants which can be grown in this and similar situations, with very little, if any irrigation after the first few years, so that in the long run the expense of maintaining such plantations ought to be very trifling." Not simply of import to the Olmsted firm, Captain Banning expected a low water design: [Banning] "is first desirous of having the valley at Santa Catalina made beautiful and would like to have a carefully prepared planting plan showing plants and trees which will grow in this arid region either without water or by aid of irrigation."³²

Unlike most of the projects developed by the Olmsted Brothers to this point, water use needed to be more inventively considered, beyond simply building reservoirs. While John Charles acknowledged that the dire water issue be studied by a skilled hydraulic engineer, there were also some practical solutions to water management, from direct rainwater collection captured from the roofs or into "tanks constructed in the ravines," to utilizing salt water in sewer use. Further, to minimize use of fresh water, ornamental pools in the pleasure grounds would be filled with saltwater, refilled through tidal flow. Saltwater could also be used for "flushing water closets and other similar purposes. Although this salt water system would involve additional expense for a separate system of housing piping it is a matter worth of study by your engineer."³³ Atypical in landscape practice at the time, John Charles suggested an "automatic subsoil irrigation system" for the summer months, a

³² John Charles, Site visit notes, 9 April 1903, [Santa Catalina], #2394, O.A. Papers.

³³ This recommendation was prescient for the period and was tested 50 years later in China. In 1955 seawater was first used in Hong Kong to flush toilets in a pilot program, then installed in all new houses and selected districts beginning in 1957 as a solution to their water crisis. Initially deemed impractical as it required a separate plumbing network in each house, by 1999 79% of households used saltwater for their sewage system. See Water Supply Department, Government of Hong Kong, "History of Water Supply in Hong Kong (1946–2007)" *Total Water Management* (2008).

system for which he said he'd had good luck on two extensive, but unnamed, private designs.³⁴

A NEW PARK TYPOLOGY FOR SOUTHERN CALIFORNIA, 1910

The Olmsted Brothers' first large-scale plans in Southern California reconsidered accepted—and expected—typologies such as the design of parks, that of lush greenswards which relied on copious amounts of water. If the firm were to be regionally responsive, park designs should model new typologies that both suited cultural use as well as fit the climate and its resources. This first large project came in 1910 as San Diego was organizing its first world fair to celebrate the opening of the Panama Canal, an engineering feat which would be completed in 1915. To differentiate their fair from the one being organized in sister city San Francisco, San Diego would have a regional focus, especially regarding its climate as highlighted in architecture, landscape architecture, and planning. December 31, 1914 would be the mid-winter opening day to lure Americans from colder climates to showcase the virtually winter-free environment of San Diego. Local architect Irving Gill was chosen for his expertise in modern Mission architecture in a radical departure from Neo-Classical styles of previous world fairs. The Olmsted Brothers firm was chosen as project landscape architect because of past successes with the Lewis and Clark Exposition in Portland, Oregon, 1906, and Alaska-Exposition in Seattle, 1909. Choosing the Olmsted firm had additional benefits for San Diego as the firm had a national reputation, but moreover their projects maintained their value after completion.

Twice before the Olmsted firm had been considered for major civic improvements in San Diego: a 1905 design of City Park awarded to landscape architect Samuel Parsons, and the 1907 comprehensive city plan lost to planner John Nolen. In 1907, Olmsted Brothers principal Percival Gallagher wrote George Marston of the Board of Park Commissioners describing the reasons the Olmsted firm wanted to develop the City Plan:

It happens that our firm has never had the opportunity of dealing with any serious problem in southern California; even in the case of Leland Stanford Jr. University, where the conditions are so much

³⁴ John Charles to Messrs. Banning Co., Letter, 1 June 1903, [Santa Catalina], #2394, O.A. Papers.

less characteristic and interesting than farther South; we were consulted only as to the general arrangement and were never in a position to express our ideas upon the development of the details upon which so much of the character and expression of any work of design depend. Frederick Law Olmsted always felt that there were great and most interesting opportunities to be made in the landscape problems which he foresaw arising through the development of southern California and indeed the whole of the warmer portions of the southeast in the United States where irrigation plays a large factor.³⁵

Working as the Exposition designers, the Olmsted firm could gain footing in the Southern California market and perhaps offer new solutions for designing with the region. Having previously lived in Mariposa, California, and joined their father at Stanford, John Charles and Olmsted, Jr. were familiar with the California climate. The San Diego project offered an opportunity to develop the exposition grounds but perhaps more importantly, after the closure of the fair, the site would be made into a new park, not of conventional park type, but one re-envisioned as more suitable for the arid climate. The site was 1400-acres and the Olmsted firm chose to develop only thirty-seven acres in the southwest corner in order to preserve most of the native landscape largely as open space, a setting rich with arroyos and canyons including the large mesa at the site's crest. Locating the Exposition in the lower corner also aligned with the Olmsted firm approach to city planning, as it connected the new design to San Diego's existing infrastructure of streets and transportation. Placement of the buildings within the irregular topography at this location had the additional benefit of a picturesque massing and spectacular views of the city and harbor (Figure 4.4).

³⁵ Percival Gallagher to George Marston, Letter, 4 June 1907, [San Diego City Development Plan], #3370, O.A. Papers.

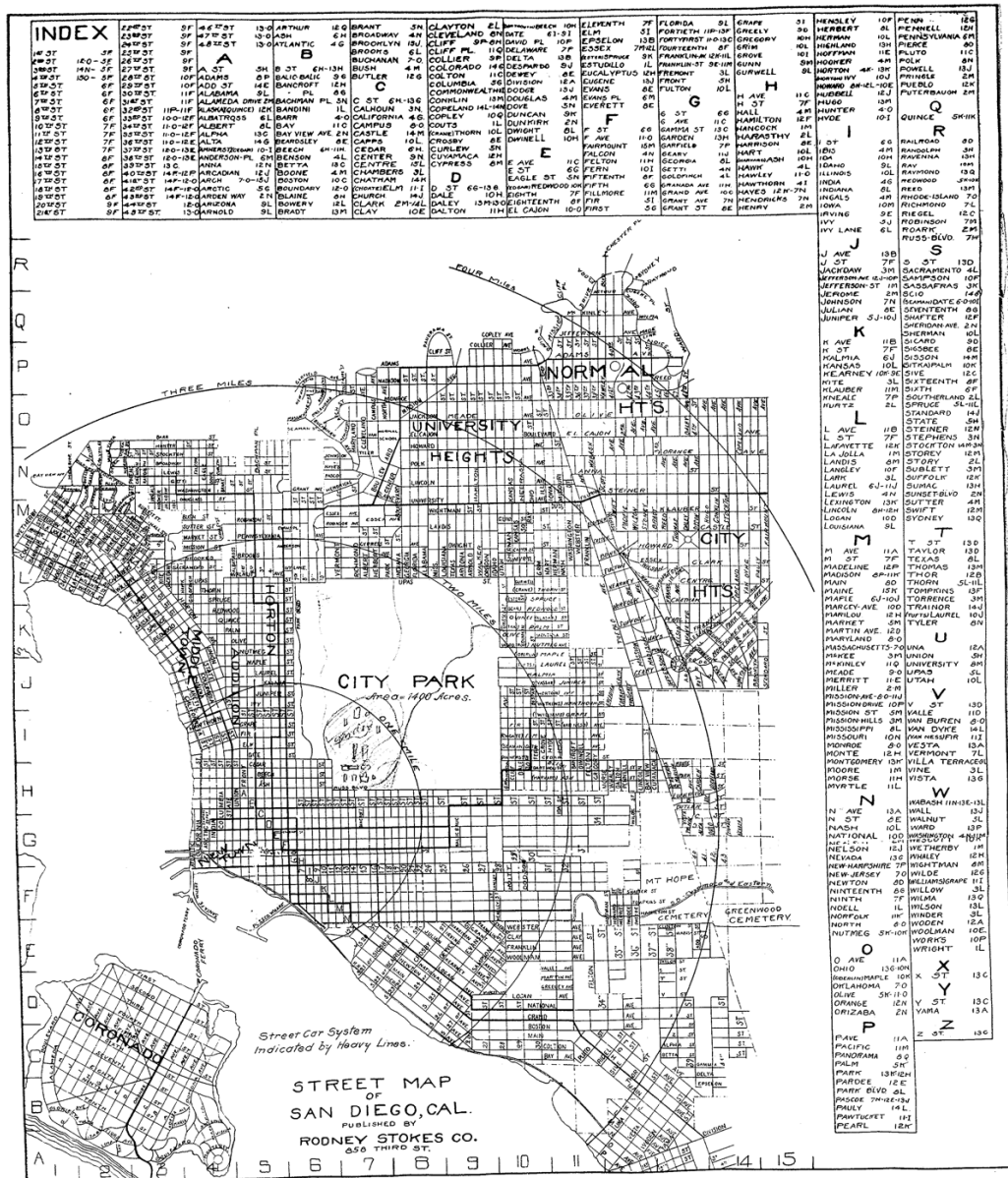


Figure 4.4: Street map of San Diego, California, c. 1910. City Park in context of San Diego. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

Ironically, heavily-watered greenswards were the norm for American park designs thanks in part to Olmsted, Sr. and the model design of New York's Central Park, with no American precedent for un-watered park designs at this scale. John Charles and Dawson worked in San Diego, and collaborated with Olmsted, Jr. who remained in their Brookline office. Offering some suggestions, Olmsted, Jr. wrote his brother:

It seems to me we ought to get something very strikingly different for San Diego from all the other Expositions, based on the conditions of warm, dry climate and irrigation, and cut out lawns entirely (but using turf perhaps in decorative panels as a precious thing?) Using shallow still basins or water with aquatic plants, and perhaps with dark or colored bottoms showing through the water, Persian fashion; lots of color and foliage and flower effects in connection with simply architectural effects and lots of pools and channels of still, reflecting water surfaces with small tinkling (?) overflows. I mean this kind of thing in contradistinction to the effort to use water with a big volume of flow from fountains, cascades, etc. as at most previous Expositions.³⁶

To reduce water-use at the fair, horticultural design focused on plants adapted to the climate. The Olmsted firm relied on research from San Diego plantswoman Kate Sessions, as well as superintendent John McLaren from Golden Gate Park in San Francisco, and native plant expert Theodore Payne in Los Angeles. Creating an on-site nursery to propagate native and hardy plants, the Olmsted Brothers looked for ways to blend the new planting design into the Mediterranean landscape. Lands outside of the main areas of the fair would be left un-irrigated as the firm chose plants that relied on dry farming, an ancient method of irrigation based solely on fog and other natural sources of water.³⁷ Aesthetic and ecologically responsive, terracing would create a Mediterranean character to the project while mitigating runoff and soil erosion during heavy winter storms. The Olmsted design minimized its impact on the natural landscape through reduced grading and irrigation and reduction of turf. It was replaced by a new park type for Southern California advocating for the native landscape as an appropriate ecological model over a heavily watered design (Figure 4.5). Unfortunately, their proposal for site location and reservation

³⁶ Frederick Law Olmsted, Jr. to John Charles, Letter, 14 November 1910, [Balboa Park], #4051, O.A. Papers.

³⁷ "Model Nursery is thriving in Park," *San Diego Evening Tribune*, 23 February 1911, 3, [Balboa Park], #4051, O.A. Papers.

of the majority of the parkland as open space was in conflict with Bertram Goodhue, the new architect brought into the project, and the Exposition board—especially John Spreckles, its main political and financial supporter. When the decision was made to move the exposition to the center of the site onto the mesa, virtually eliminating any way of preserving open space, the Olmsted firm was unwilling to attach their name to the project as it was in direct conflict with their ethical concerns and professional responsibilities. They submitted their resignation on September 2, 1911 and within one week, moved the office back to Brookline. The replacement team of landscape designers, Paul Thiene, Frank Allen and John Morley, returned to an accepted, water-intensive landscape design for the exposition.³⁸

³⁸ For a more thorough discussion of the Olmsted Brothers' design for the San Diego Exposition, now Balboa Park, see Appendix 2, Christine Edstrom O'Hara, "The Panama-California Exposition, San Diego, 1915: the Olmsted Brothers' Ecological Park Typology" *The Journal for the Society of Architectural Historians* 7, no. 1 (March 2011): 64 – 81.

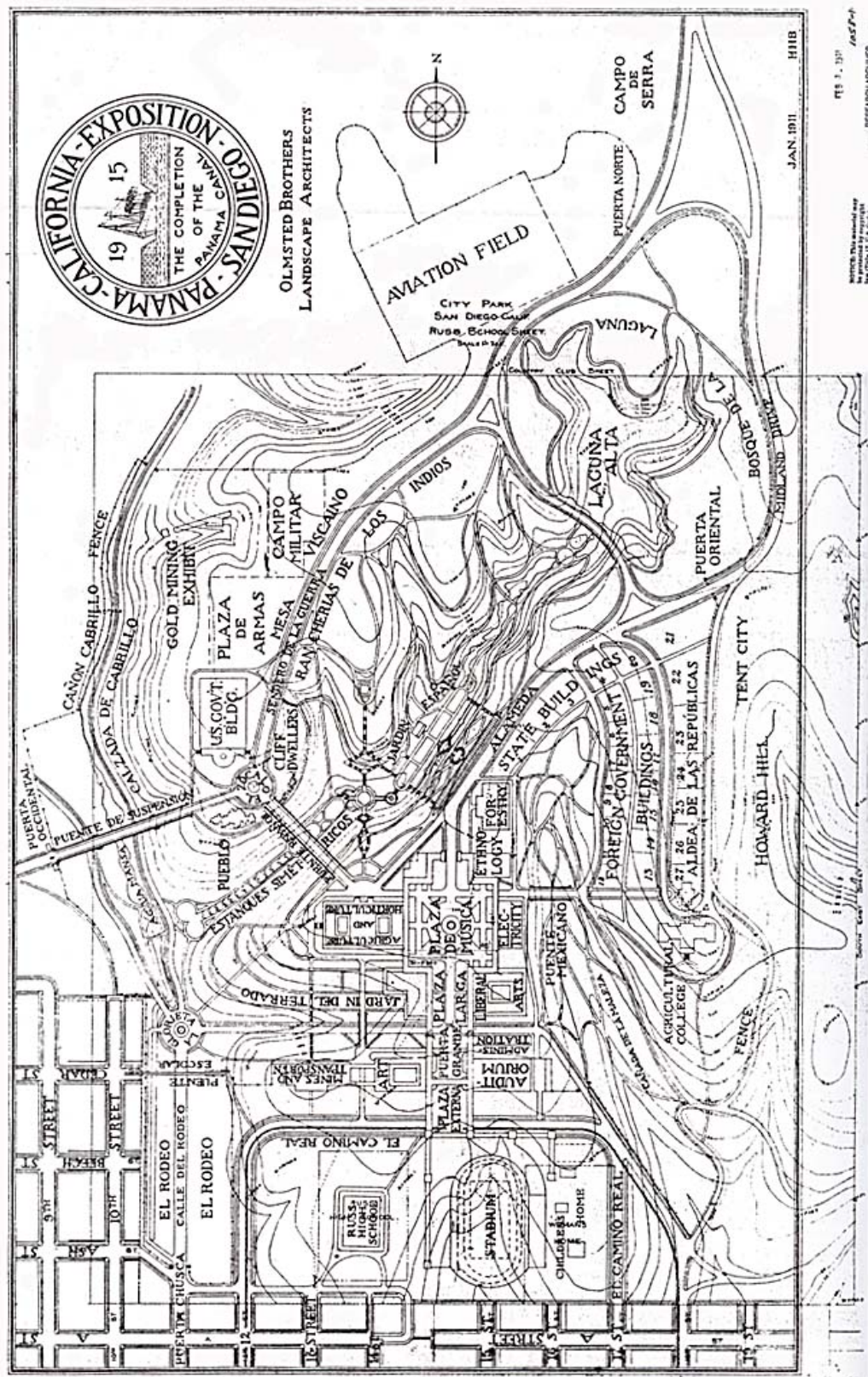




Figure 4.6: Panama-California Exposition, 1915. Palm canyon in foreground is a rare remnant of the original planting by the Olmsted Brothers. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

GARDEN CITIES AND THE MAKING OF AN IDEAL INDUSTRIAL TOWN

At the same time that the Olmsted firm was working on design of the Panama-California Exposition in San Diego, they were hired to design a model industrial town. The Olmsted Brothers' first built design in Southern California was in Torrance, 1911, a site in southern Los Angeles County (Figure 4.6). Designed as a Garden City, this planning type represented the best environmental model at the time. The design of Torrance was characterized by many of Howard's original Garden City ideas, but in a newly interpreted expression. Fifteen miles northwest of Long Beach, the Dominguez Ranch was owned by real estate developer J.S. Torrance. Barley fields covered the land with a nearby swamp, locally called "Nigger Slough," which filled periodically by overflow from the Los Angeles River.³⁹ Torrance wanted a design for a model industrial town built on a 3,500-acre site where he would add two manufacturing plants for the Pacific Electric and Union Tool Company, both adjacent to Pacific Electric Railway lines.

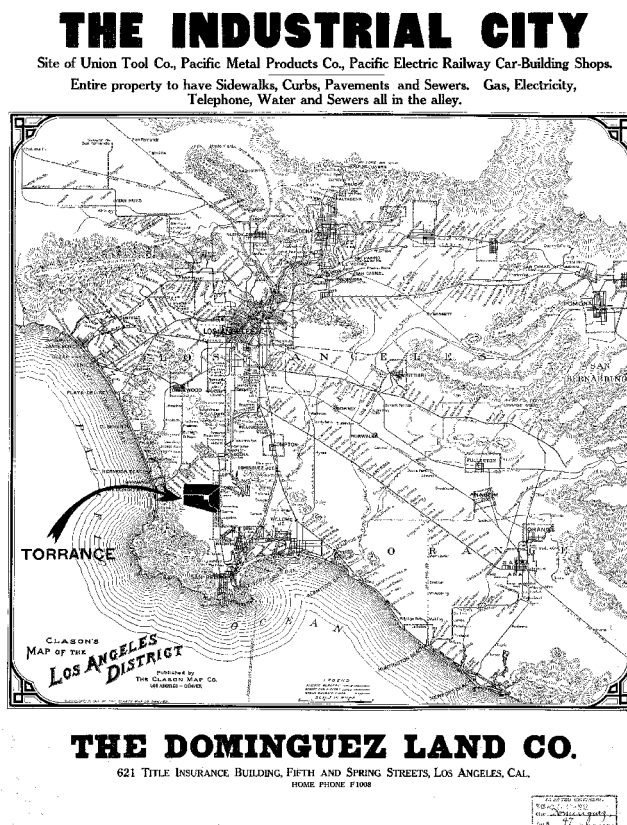


Figure 4.7: Pacific Railway Car-Building Shops – Locations of Dominguez to Surrounding County, 1912. To show geographical context, Torrance is in southern Los Angeles County, four miles east of the Pacific Ocean and was barley fields prior to community development. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

³⁹ Later named Gardena Slough then Dominguez Laguna, the derivation of this slough is discussed in detail in Chapter 6: Los Angeles Parkways.

In July 1911, Frederick Law Olmsted, Jr. received a letter from George Damen who had been hired by Torrance to help with contracts for connections and right-of-way agreements for electric and stream railroads on behalf of the new community. Mr. Torrance, Damen wrote, wanted Olmsted, Jr. to join their team as his name offered an “advertising advantage.” Damen also offered the enticement that Los Angeles was looking for a comprehensive city plan, with the “district planned in conjunction with the transportation developments.” Damen volunteered, “I am in hopes that Mr. Torrance of the Dominguez estate can see his way clear to bring you here in connection with his work, and that while you are here you would have an opportunity of going over the Los Angeles plan work with a number of men who will be interested, and who will probably have a large hand in its financing.”⁴⁰ Damen needed a quick response to his letter as a 36 inch diameter water pipe was about to be laid across the ranch, using Dominguez Ranch irrigation bonds to finance a water plant, and bringing well water from the banks of the San Gabriel River to the new town site. The prospect of larger work in Los Angeles, especially city planning, was intriguing to Olmsted, Jr. While his contract for the Torrance proposal mirrored many of the same deliverables as his recent city plans for Pittsburgh, Pennsylvania and Rochester, New York, Los Angeles could be a testing ground for ideal communities.⁴¹

In a 1908 tour of Europe, Frederick Law Olmsted, Jr. visited Germany, France, Holland and Britain on a three-month professional exploration to study Garden City developments.⁴² The philosophical underpinning of the Garden City movement stemmed from Ebenezer Howard’s concept of blending town and country planning principles to provide a working-class alternative to crowded unhealthy cities. While on this Garden City tour, Olmsted, Jr. received a letter from philanthropist and social justice advocate Robert Weeks de Forest. Writing on behalf of the Russell Sage Foundation, his inquiry was perfect timing, “We are proposing to go into housing on a fairly large scale, in the suburban district of New York. Our plan is not merely to give houses but to lay out these tracts in some way different from the abhorrent rectangular city block, and to make our garden city somewhat attractive by the treatment and planting of our streets, the possibility of little gardens, and

⁴⁰ George Damen to Frederick Law Olmsted, Jr., Letter, 11 July 1911, [Dominguez Estate], #5354, O.A. Papers.

⁴¹ Frederick Law Olmsted, Jr. to J.S. Torrance, Letter, 30 August 1911, [Dominguez Estate], #5354, O.A. Papers.

⁴² Witold Rybczynski, *Makeshift Metropolis: Ideas about Cities* (New York: Scribner, 2010), 33.

possibly some public spaces."⁴³ Olmsted, Jr. had just completed the plans for America's first Garden City, Forest Hills Gardens in Queens, New York, when he was contacted to develop a similar model town in Torrance.⁴⁴

Torrance as a Garden City, 1911

Shaped by British Garden City designers as well as his European study tour, Olmsted, Jr. appropriated the Garden City model, partly for its social reform for worker housing, but also for its planning and separation of land uses, profuse use of green space, and healthy living within an industrial town. For Torrance, he blended the ideas and spatial layout of both Bournville in Birmingham, England and Letchworth in Hertfordshire, England.⁴⁵ In plan view, Bournville lacked the Olmstedian spatial planning ideals, yet imagery of the English town is suggestive of the firm's picturesque aesthetic for community designs (Figure 4.8 and Figure 4.9). Letchworth Garden City, though not an industrial town, posed a stronger spatial plan and articulation of zoned spaces with a grander entry and organizational framework (Figure 4.10). Adding from the recent design of Forest Hills Gardens, one can recognize the blending of all three communities into the new design at Torrance (Figures 4.11 - Figure 4.16). Of special note for this community, in constructing his team for this West Coast project, Olmsted, Jr. considered local water man William Mulholland as a general manager.⁴⁶

⁴³ Rybcznski, *Metropolis*, 34.

⁴⁴ Frederick Law Olmsted, Jr. to Partners, Letter, 15 December 1911, [Dominguez Estate], #5354, O.A. Papers. Olmsted, Jr. wrote his partners in Boston, "This is a good deal bigger than the Forest Hills project and much more (lively?) and drive ahead than the industrial town in Canada, what's its name, JCO's job."

⁴⁵ In 1914, Olmsted, Jr. wrote that he was currently influenced by the writing of Lawrence Veiller in *A Model Housing Law* (New York: Survey Associates Inc., 1914). This book was an elaboration of his prior book *A Model Tenement House Law* (1910), with ways to adapt the law's provisions for small American cities and towns. At the time, it was considered an invaluable addition to the literature on the art of housing reform. Frederick Law Olmsted, Jr. to James A. McKibben, Boston Chamber of Commerce, Letter, 27 October 1914, [Dominguez Estate], #5354, O.A. Papers.

⁴⁶ In telegrams, Olmsted, Jr. wrote his brother John Charles that perhaps William Mulholland might be secured as the general manager for Torrance, "Telephone or see John Freeman on my behalf and elicit his impression as to whether Wm. Mulholland, if he can be secured has the right quality for general manager of our town development here to handle not only street, park and general municipal construction and 100 of small houses and lots but also organize and direct Sales department assuring tactful dealings with purchasers and

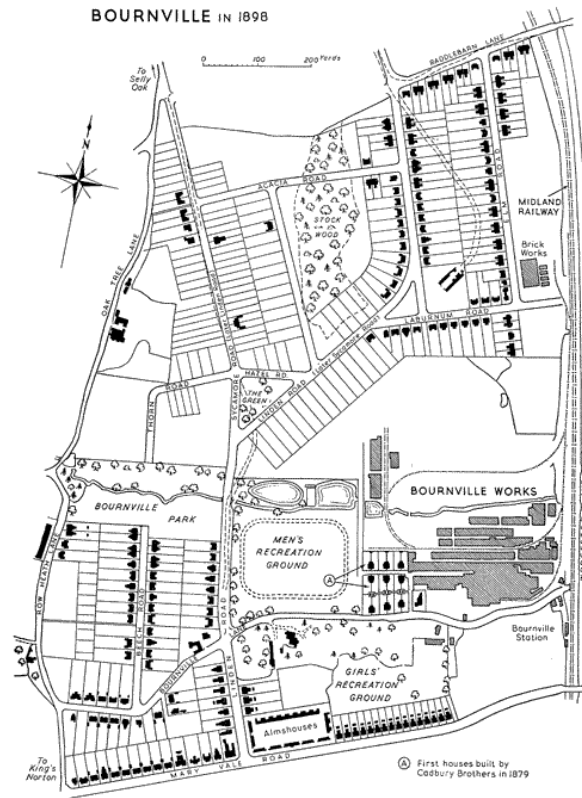


Figure 4.8: Bournville, England, 1898. Designed by the Cadbury Brothers in 1893, the early Garden City design mirrored Howard's philosophy, but did not use its diagrammatic form for organization of the community. Credit: The Bournville Village Trust Archive, Library of Birmingham



Figure 4.9: Linden Road. A street of cottages at No. Cadbury, Garden Suburb called Bournville, c. early 1900s. Image of the picturesque layout of the village appealed to Frederick Law Olmsted, Jr.'s aesthetics. Credit: The Bournville Village Trust Archive, Library of Birmingham

tenants and maintain high practical esthetic standard in petty details of maintenance. Mulholland is a remarkably capable executive but I have no line on his probable appreciation of esthetic consideration or tact and resourcefulness in managing lot buyers or residents." Frederick Law Olmsted, Jr. to John Charles Olmsted, Letter, 11 Dec 1911, [Dominguez Estate], #5354, O.A. Papers.

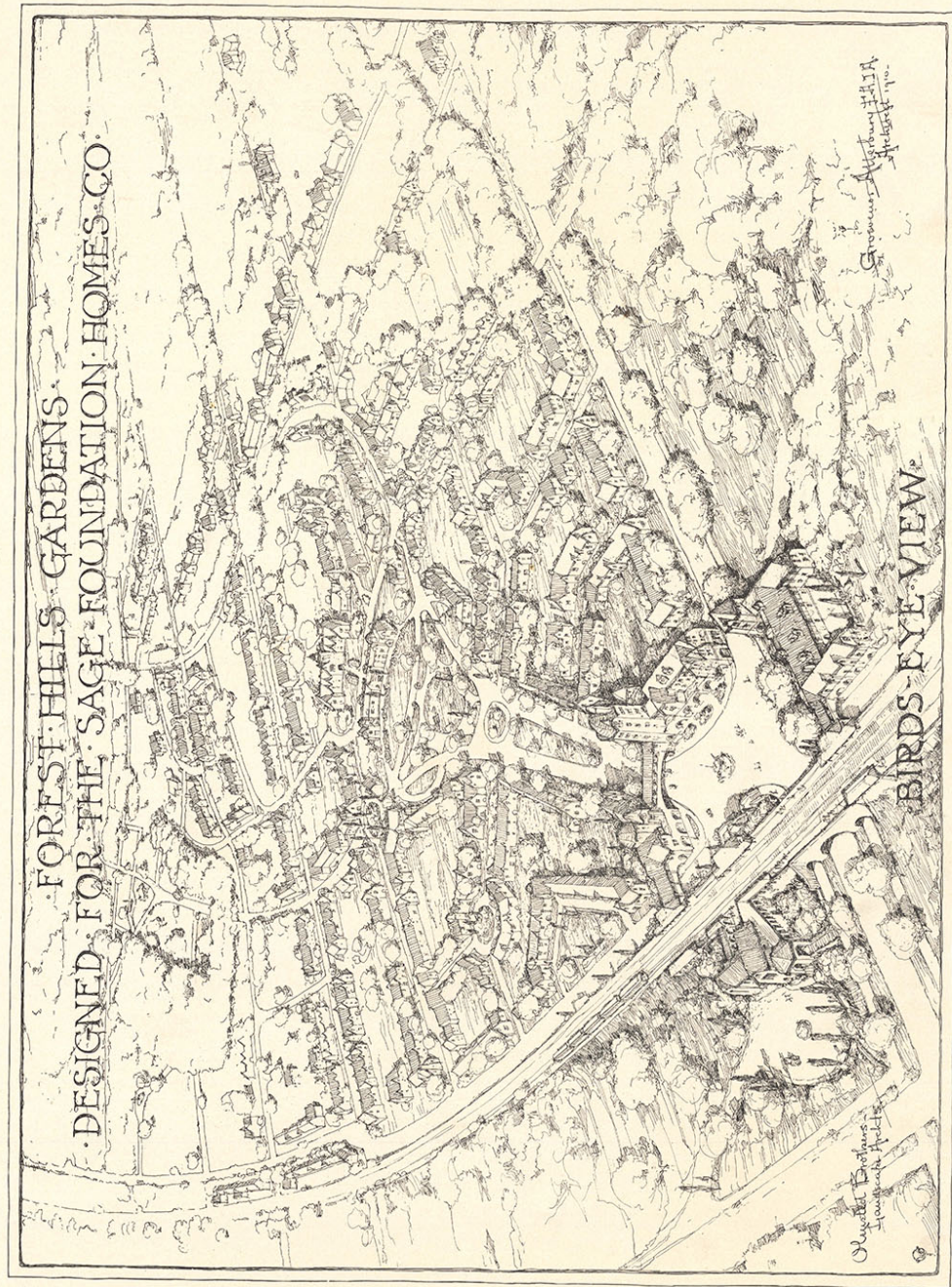


Figure 4.12: Olmsted Brothers' design of Forest Hills Gardens, Queens, New York, 1909. This design was the first Garden City in the United States. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site



Figure 4.13: Drawing of Station Square at Forest Hills Gardens, 1910. Image captures the picturesque quality despite the modern planning ideals. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

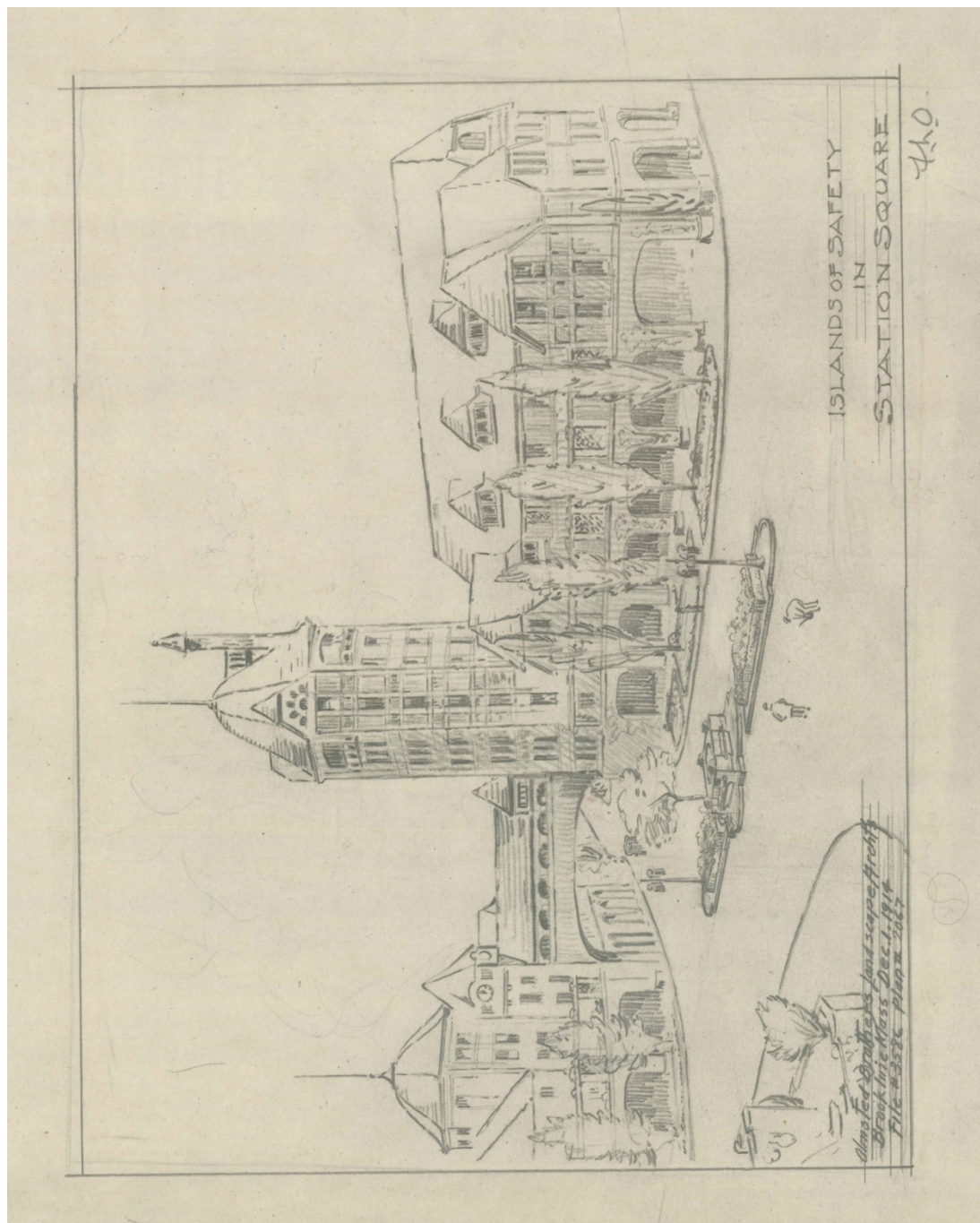


Figure 4.14: Islands of Safety in Station Square, 1914. Drawing of the main plaza at Forest Hills Gardens. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

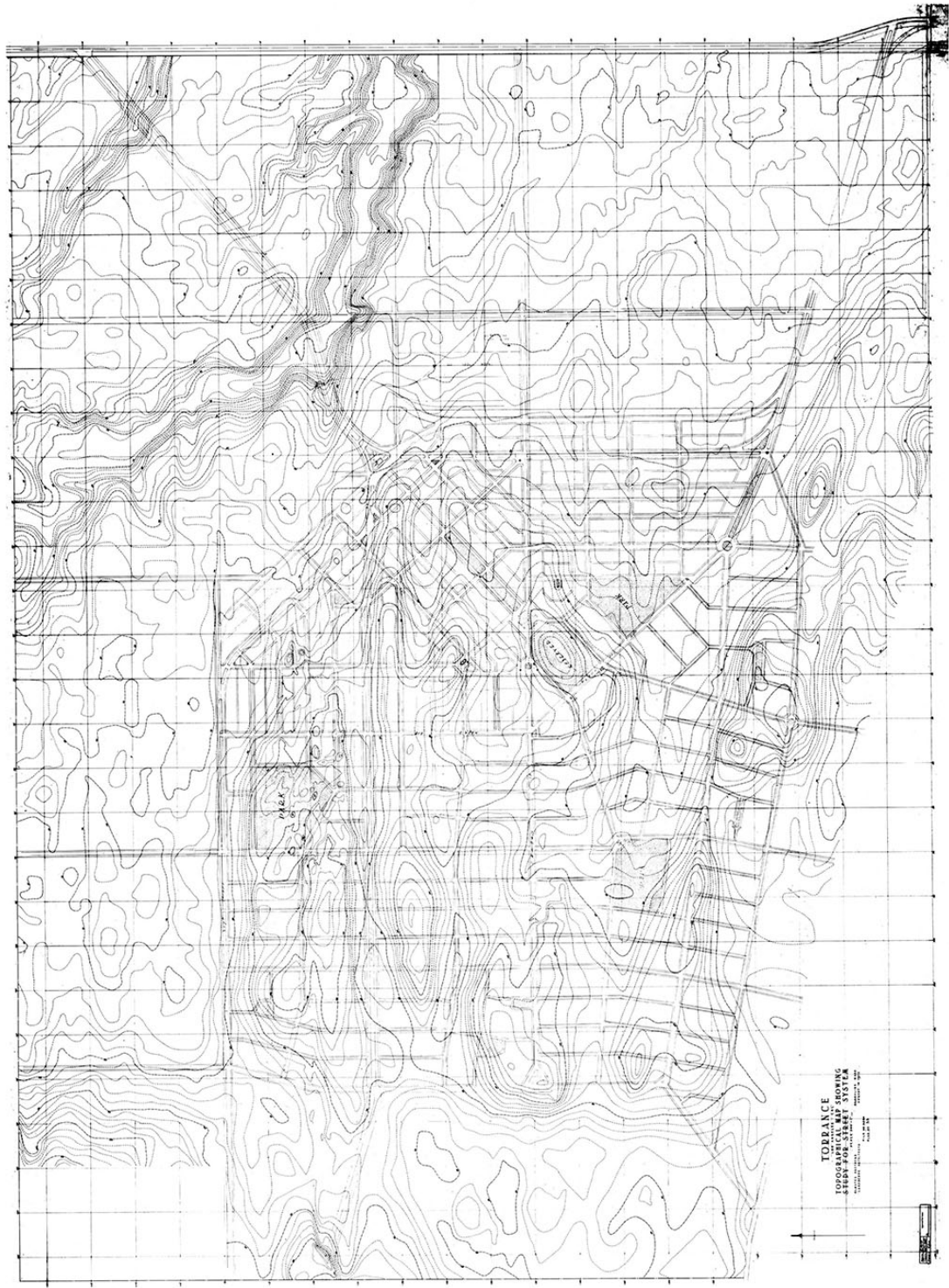


Figure 4.15: Study for General Plan of Torrance, 1912. Layout of community over existing contour lines. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

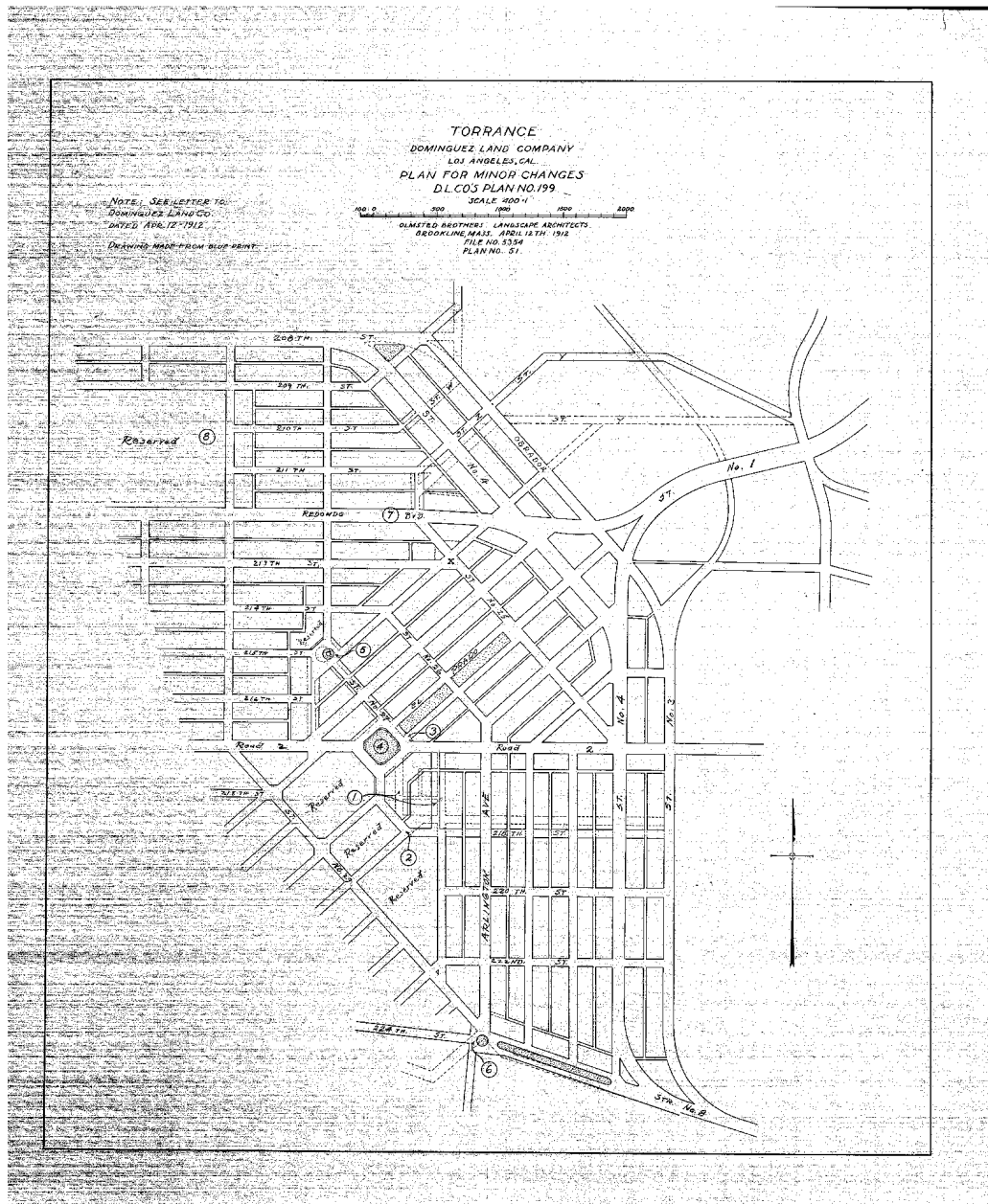


Figure 4.16: Plan of Torrance, 1912. Layout of new community in many ways resembled Garden City plans from Letchworth and Forest Hills Gardens. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

Frederick Law Olmsted, Jr. laid out the city of Torrance into four discreet districts: industrial, residential, business and social center, and agriculture, with the main entrance to the property facing Los Angeles in the northeast corner where it connected with the Southern Pacific railway tracks and a roadway. The intention was to design the industrial city to maximize green space and minimize the effects of industrial pollution. A block row of streets would be sandwiched between the downtown and the industrial area and provide a variety of functions, largely cheaper grade housing such as small flats and boarding houses, mingled with small industrial businesses for occupations such as blacksmiths, plumbers and carpenters. The main street would be mixed-use with retail below and apartments and industrial administrative offices on the upper floors. More expensive residential housing was located on the extreme western edge of the community such that the ocean breezes would avert all factory pollution from this area. While designing Forest Hills Gardens, the firm had conducted wind studies for the community layout, a technique which assumedly was re-used reduce pollution in the residential areas (Figure 4.17). Olmsted, Jr.'s intention with social reform was to provide for density but in a "civilized and sanitary way." In response, residential back lots could be used for productive gardens with 5-10% of land reserved for parks and playgrounds within the residential district. To better understand the firm's views, a pamphlet from Sage Foundation Homes on their design at Forest Hills Gardens was included for J.S. Torrance's review.⁴⁷

Over the course of a year, the more typically Olmstedian layout of Torrance was compromised as the project engineer suffered with locating electrical and sewer lines within a curvilinear street layout. Dawson wrote that the project engineer Ralph Bennett thought the streets looked "crooked" because there wasn't a grid and that the engineers had to get the "shock of such a strange plan."⁴⁸ By 1912, the plan evolved to a more typical grid-like layout, yet cleverly it remained not only a Garden City, but kept a sense of *genius loci* in the design. Disregarding an east-west grid from the previously platted adjacent streets, a new angle oriented the city towards its greatest environmental asset: a view of Mt. Baldy and the San Gabriel mountains.

⁴⁷ Frederick Law Olmsted, Jr. to J.S. Torrance, Letter, 20 December 1912, [Dominguez Estate], #5354, O.A. Papers.

⁴⁸ James Frederick Dawson to Frederick Law Olmsted, Jr., Letter, 27 March 1912, and James Frederick Dawson to Frederick Law Olmsted, Jr., Letter, 5 April 1912, [Dominguez Estate], #5354, O.A. Papers.

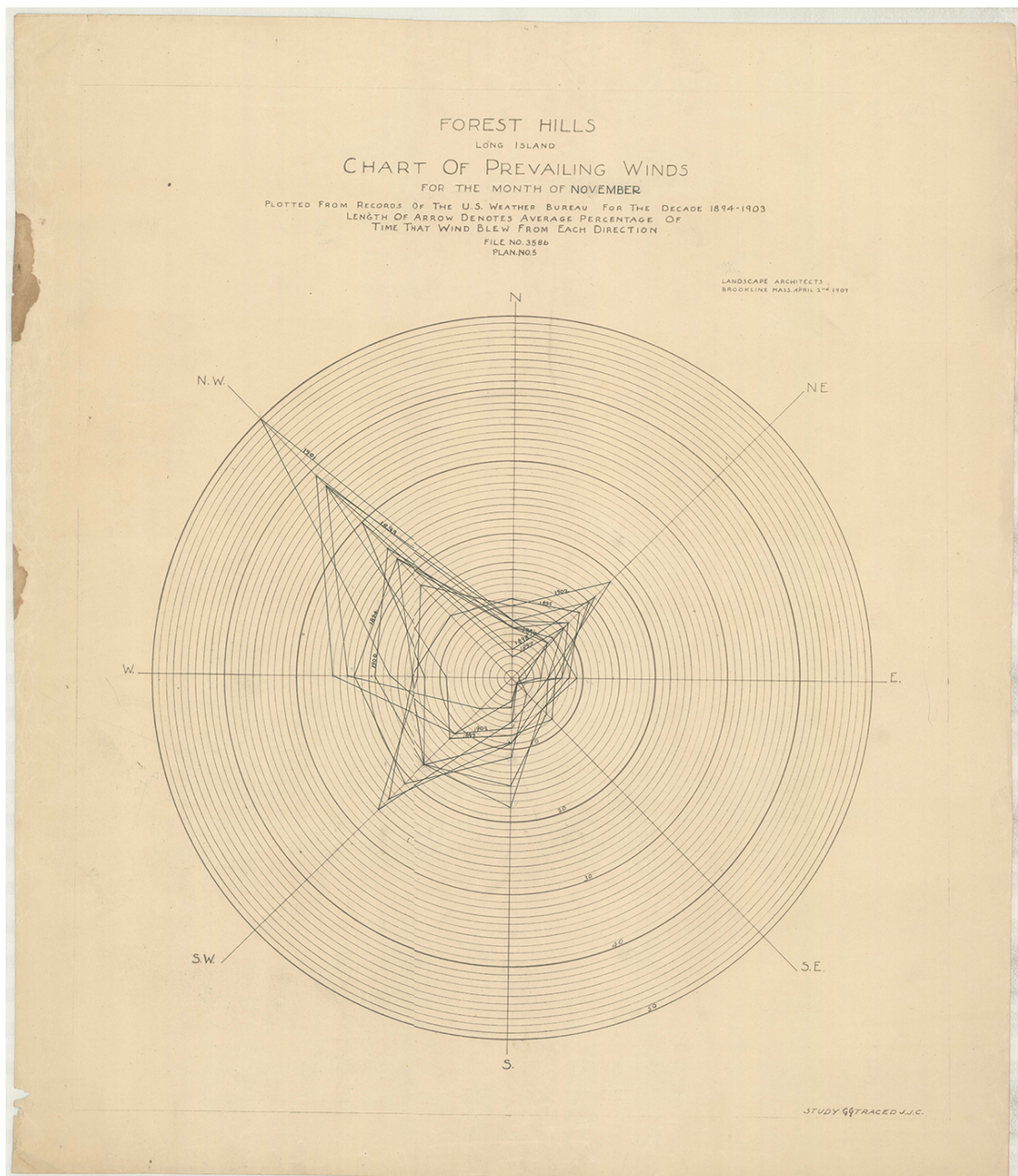


Figure 4.17: Chart of Prevailing Winds for Month of November, 1909. Wind study maps used in the design of Forest Hills Gardens with that knowledge applied again in the design of Torrance. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

San Diego architect Irving Gill once again joined the Olmsted firm on this project, with his modernist aesthetics and progressive ideas used in construction of low-cost worker housing. Buyers who visited model homes, however, preferred the Art and Crafts model to Gill's seemingly sterile concrete slab design and largely rejected his ideas. While the city was considered a social justice design for worker housing and humane living quarters, it was not free of racist influences. Racial division through separation of ethnicities and cultures within the town appeared to have been at issue during much of the design. Architecture was designed specifically to accommodate different cultures' preference for use of space, including courts for "cholos and other low grade laborers."⁴⁹ This same prejudice excluded Garden City tenets of collective land ownership and control, which many Americans considered a socialist or "communist" practice.⁵⁰

Despite the setbacks, this community was the Olmsted firm's first attempt to design in Southern California with new planning ideas, as Garden City models became precursors to greenbelt community designs. Though not scientifically ecological models, they were the first tests of environmental models of town planning, which mitigated pollution, incorporated architecture rich in light, fresh air and privacy, while adding parks and playgrounds, surrounded by small farm plots.⁵¹ Like Catalina Island, unusual water sources for irrigation were considered by the firm, using not only the Dominguez wells, but also Olmsted, Jr. suggested Bennett consider the possibility of "using [the city of Torrance's] sewage for irrigation...as a partial offset against the cost of operating a sewage pumping plant or commonly used sand filters."⁵² Review of the final plans with the built town suggests that much of the Olmsted Brothers plan was followed; however, through too many accommodations to the engineers, it was not one that Frederick Law Olmsted, Jr. was apt to reference for potential new clients. In a 1916 letter to George Ford, AIA Chairman of Town Planning, Olmsted, Jr. wrote, "the Torrance plan was more or less butchered by the local

⁴⁹ Frederick Law Olmsted, Jr. to Thomas Fellows, 12 January 1912, [Dominguez Estate], #5354, O.A. Papers.

⁵⁰ See Richard E. Fogelson, *Planning the Capitalist City: The Colonial Era to the 1920s* (Princeton, NJ: Princeton University Press, 1986), 189 as he quotes Charles Nelson Glabb and A Theodore Brown, *A History of Urban America* (New York: Macmillan, 1967), 263-271.

⁵¹ See also Todd Gish for his discussion of Torrance as a Garden City design. Todd Gish, "Myth Busting: Challenging the notion of an unplanned Los Angeles," *Planning* (January 2012).

⁵² Frederick Law Olmsted, Jr. to Ralph Bennett, Letter, 19 February 1912, [Dominguez Estate], #5354, O.A. Papers.

people, and I haven't enthusiasm enough to take time to write out [about it]. The houses erected, so far as I know, are of the most ordinary California type."⁵³

CITY PLANNING AND INFRASTRUCTURE FOR THE WEST COAST, 1911 - 1914

Expert in landscape design at all scales, the Olmsted Brothers firm was greatly interested in comprehensive city planning and infrastructure designs, and for Los Angeles the prevalence of automobility would override many of the decisions. Like designs for parks and small communities, there were differences and unique challenges between work on the East and West Coast. Sizable reservations of land in the American West were still fundamentally undeveloped by 1914, and cities like Los Angeles had thus far a relatively short development history in comparison to Olmsted, Jr.'s home in Boston. Drawn by the warm climate, natural scenery, and business opportunities, population increase in Los Angeles County grew from 12,000 in 1880 to 422,000 by 1910, with a vast onslaught of growth to come.

As George Damon, now dean of Throop Polytechnic Institute, later to become Caltech, had promised the Olmsted Brothers, Los Angeles was interested in a comprehensive city plan. Previous city planners had offered proposals such as Los Angeles social reformer Dana Barlett, who proposed construction of parks and promenades along and across the Los Angeles River, connected to a civic center in downtown Los Angeles. City Beautiful champion Charles Mulford Robinson added his vision for Los Angeles, recommending curvilinear tree-lined streets, riverbanks lined by gardens, with a long boulevard lit by electric lamps extending to the railway station. Robinson had spent three weeks in the city and published his recommendations in *Los Angeles, California: The City Beautiful*, 1909, yet nothing had been implemented.⁵⁴ In 1910 Los Angeles landscape architect Wilbur Cook wrote John Charles in San Diego:

⁵³ Frederick Law Olmsted, Jr. to George Ford, Letter, 1 July 1916, [Dominguez Estate], #5354, O.A. Papers.

⁵⁴ See Greg Goldin and Sam Lubell's discussion of Mulford's City Beautiful Plan as well as their essay "City of Illusions" in *Never Built Los Angeles*. The authors argue that the reason so many innovative ideas were never built in Los Angeles was due to "intimidating blockades of bureaucratic fiat, nervous neighbors, conservative developers, and elusive financing." Greg Goldin and Sam Lubell *Never Built Los Angeles* (Los Angeles: Metropolis Books, 2013), 24, 48-49.

The mayor has appointed a City Planning Commission to take up the matter of a comprehensive plan for Greater Los Angeles, running from the foothills to the seashore. Various members of the Commission have been in my office from time and time relative as to whom should be employed on the work. I told them repeatedly that you are the man for the work...You are doubtless aware that Charles Mulford Robinson made a report some two or three years ago. It was a result of a month's study and as a Report, I consider it of little value from a practical point of view. Some members of the Commission favor his re-employment, but I believe that when they actually get down to business it will be you.⁵⁵

John Charles responded that he wanted to wait until city officials decided on their financial situation before hiring the firm and that he was "not a lecturer or writer for the public press and therefore I do not wish to address a public meeting, but only a select number of people from your city planning committee."⁵⁶ More comfortable as the public face for the firm was Olmsted, Jr. who took the lead in Los Angeles.

Frederick Law Olmsted, Jr. argued that successful development of a city required expertise from a variety of stakeholders, from those involved with land management, to the arts, as well as those in control of public health, and recommended the list of constituent stakeholders for membership on the Los Angeles City Planning Commission: one member each of the Park Commission, the Board of Public Works, the Harbor Commission, the Municipal Art Commission, the Board of Public Utilities, the Playground Commission, the Board of Public Service Commission, the Housing Commission, the Health Commissioner, and three citizens not otherwise connected with the city government to be appointed by the mayor. Olmsted, Jr. had been a long-time advocate for a professional planning division in design and presented his ideas at the first American City Planning Institute in 1909. He lectured:

City planning is no recent development. But there are new features about the subject today. There is a growing appreciation of the profound influence which activities carried on in one part of the field and with a view to one set of purposes may have upon the conditions in another part of the field. There is a growing realization of such things as the influence of street plans and depths

⁵⁵ Wilbur Cook to John Charles Olmsted, Letter, 2 December 1910, [City Plan Commission, Los Angeles], #5372, O.A. Papers.

⁵⁶ John Charles Olmsted to C.H. Randall, Chairman of Sub-committee of Los Angeles City Planning, Letter, 22 December 1910, [City Plan Commission, Los Angeles], #5372, O.A. Papers.

of block upon the type of building and thus upon the amount of light and air in the peoples' dwellings; such as the effect of railroad locations on the distribution of factories and on the congestion of population and character of housing; such as the effect of ordinances devised to meet structural or sanitary requirements upon the comeliness of the city; and such as the interrelation of transportation systems and methods of taxation in their influence upon the kind of homes in which the people shall find what they can afford to live. The complex unity, the appalling breadth and ramification, of real city planning, is being borne in upon us as never before. The ideal of city planning is one in which all these activities—all the plannings that shape each one of the fragments that go to make up the physical city shall be so harmonized as to reduce the conflict of purposes and the waste of constructive effort to a minimum, and thus secure for the people the city conditions adapted to their attaining the maximum or productive efficiency, of health and of enjoyment of life.⁵⁷

Becoming president of the American City Planning Institute in 1917, original charter member Frederick Law Olmsted, Jr. believed planning and landscape architecture were distinct disciplines requiring distinct professional organizations; nonetheless, Olmsted, Jr. incorporated planning as a normative practice into landscape architecture, enlarging the scale and scope of his projects. Part of a large group of planning advocates, he joined with Daniel Burnham, George Kessler, John Nolen, and Charles Mulford Robinson to develop a methodology that provided a comprehensive study of a region, an organic and plastic document that provided guidance for town planning and updated as the city changed, with the intent that the plan would be unique to each city, its region and local culture. *The Los Angeles Herald* published a 1911 speech by George Damon as he argued to the City Planning Commission that Los Angeles' district plan should be

large enough to include provisions for housing, good roads, water supply, sewage disposal, pipes, conduits, wires, location of factories, parks, playgrounds and open space to furnish settings as well as site for public buildings, the control of the development of unbuilt sections and a comprehensive transportation policy for the entire metropolitan district. To make this plan effective, it must represent the consensus of organized public opinion of all the various organizations and private forces working to make the entire district

⁵⁷ Frederick Law Olmsted, Jr., *City Planning* (paper presented at the conference Second National Conference on City Planning and Congestion of Population, Rochester, NY, May 1910).

the best-regulated and the most healthful, prosperous and beautiful community the world has ever seen.⁵⁸

Transportation planner Bion Arnold had been brought to Los Angeles in 1911 to develop a comprehensive transit plan for rail, car lines, and subways. Even at this early period in city development, Los Angeles was already bogged down by automobile traffic, as the headlines read “Congestion Unparalleled.” Arnold wrote of Los Angeles, “In my study of transportation systems of the various cities in the country I have known nothing worse than the congestion on Main Street from First to Seventh, not have I known a situation which apparently can be corrected more readily.”⁵⁹ However, by 1914, planning in Los Angeles had “been laid on a shelf” according to Kate Bassett, a lay member of the City Planning Association, in a letter to Frederick Law Olmsted, Jr.

We are a city growing tremendously in a haphazard [way]...Much valuable work has been done by such men as Arnold and Dawson on traffic and transportation, Goodrich on the Harbor, Mulholland on the aqueduct, Dr. Bartlett on the humanitarian side of things, and others in various lines...Of course I know that an adequate city plan is a work of several years and is a growing thing, but am I right in believing that an expert survey is what is needed first? Your planned Torrance, and the attorney for the Vanderlip purchase [of Palos Verdes] confirmed a recent newspaper report that your services had been secured and that you would soon be with us doing that work. This filled me with great hope that we might also have your help at the same time in working out our problems, for it will all be our city a hundred years hence.⁶⁰

When Olmsted, Jr. submitted his fee for city planning, a range of \$50,000-\$100,000, the city did not move forward in hiring him, that is, until they were desperate for a master plan in the 1920s.

Desiring a foothold in the Los Angeles market required a new approach for the Olmsted firm as the opportunities and constraints were so different from their East Coast

⁵⁸ “Civic Center Given Boost,” unnamed publisher, c. 1911, [City Plan Commission, Los Angeles], #5372, O.A. Papers.

⁵⁹ “8-Rail System to Harbor is Arnold Plan,” *Los Angeles Herald*, 24 October 1911, 2, [City Plan Commission, Los Angeles], #5372, O.A. Papers.

⁶⁰ Kate Bassett to Frederick Law Olmsted, Letter, 5 June 1914, [City Plan Commission, Los Angeles], #5372, O.A. Papers.

work. Land speculation created the haphazard growth pattern that Kate Bassett had opined to Olmsted, Jr. Cheap land allowed developers to create subdivisions on any open parcel of land, without linking it to existing infrastructure. City planning would need to address cohesion to dispersed development and circulation for the city.

FITNESS FOR CALIFORNIA'S COMMUNITY DESIGNS

Due to the reputation of the Olmsted firm, the leading land developers in America hired them to design new communities. In the early 1900s, two of the top developers in Northern California were Duncan McDuffie and Walter Leimert. While the ethos for speculative Los Angeles developers rarely seemed to reflect an environmental consciousness at the turn of the century, this was not the case in the San Francisco Bay area with special regard to McDuffie and Leimert. Over the course of the next 20 years of design in California, these men routinely turned to the expertise of the Olmsted firm, in a shared ecological approach to subdivision design in an appreciation of the local environment. While adept in community design, the climate, plants, and water would once again test the Olmsted firm with both developers serving ironically as early mentors to development in California.

St. Francis Wood, San Francisco, 1911

Duncan McDuffie was the developer for St. Francis Wood in San Francisco. A long-time local resident, McDuffie graduated from University of California in 1899 and soon after became a residential developer in the Berkeley area. Over the course of his career, he was president of multiple development establishments including the Mason-McDuffie Company, the Berkeley Development Company, the Westgate Park Company, the Garden Homes Company, and St. Francis Home Building Company. He developed not only St. Francis Wood, but also subdivisions in Claremont Park, Claremont Court and Northbrae in Berkeley. A longtime outdoorsman, he grew up hiking and camping in the Sierras with his friend "Little Joe" Conte, Jr., a Berkeley mechanical engineering professor, who along with McDuffie was influential in the growth of the Sierra Club. McDuffie was an environmental activist and president of the Sierra Club from 1928 -1931 remaining a member of their executive committee for over ten years. McDuffie was made chair of the Save-the-Redwoods League in 1923, and through this leadership led to chairmanship of the newly

created California State Parks Council in 1925. In keeping with his devotion to California's natural landscapes, his subdivision designs were characterized by a commitment to design that integrated the natural setting with the homes, parks, and open space layouts.

Through a recommendation by Bay Area architect John Galen Howard, McDuffie contacted the Olmsted Brothers in 1912 to help design his new 176-acre subdivision in San Francisco. Contrary to many developers with whom the Olmsted firm had worked, McDuffie was uninterested in speculative projects, nor was his focus on social reform. Rather, he was committed to a permanent development that adapted to the existing ecology of the site. His submittals to the firm in their first letters included his design of the initial subdivision layout, a contour map, and a map showing the development area within a larger regional focus. A departure from the urban grid layout of San Francisco, the plan was aligned to the natural contours of the site (Figure 4.18 and Figure 4.19). Originally part of the San Miguel Rancho, the land was later purchased by Adolph Sutro in the 1870s, upon which Sutro planted a forest of pine, cypress and eucalyptus trees. Over the course of six months of studying the site, a plan had been developed by McDuffie and his four partners: C.C. Young, later governor of California, and future developers Louis Titus, Perry T. Thompkins, and Elmer I. Rowell, a group that would subsequently have great political and development power not only in the Bay Area, but state politics as well.

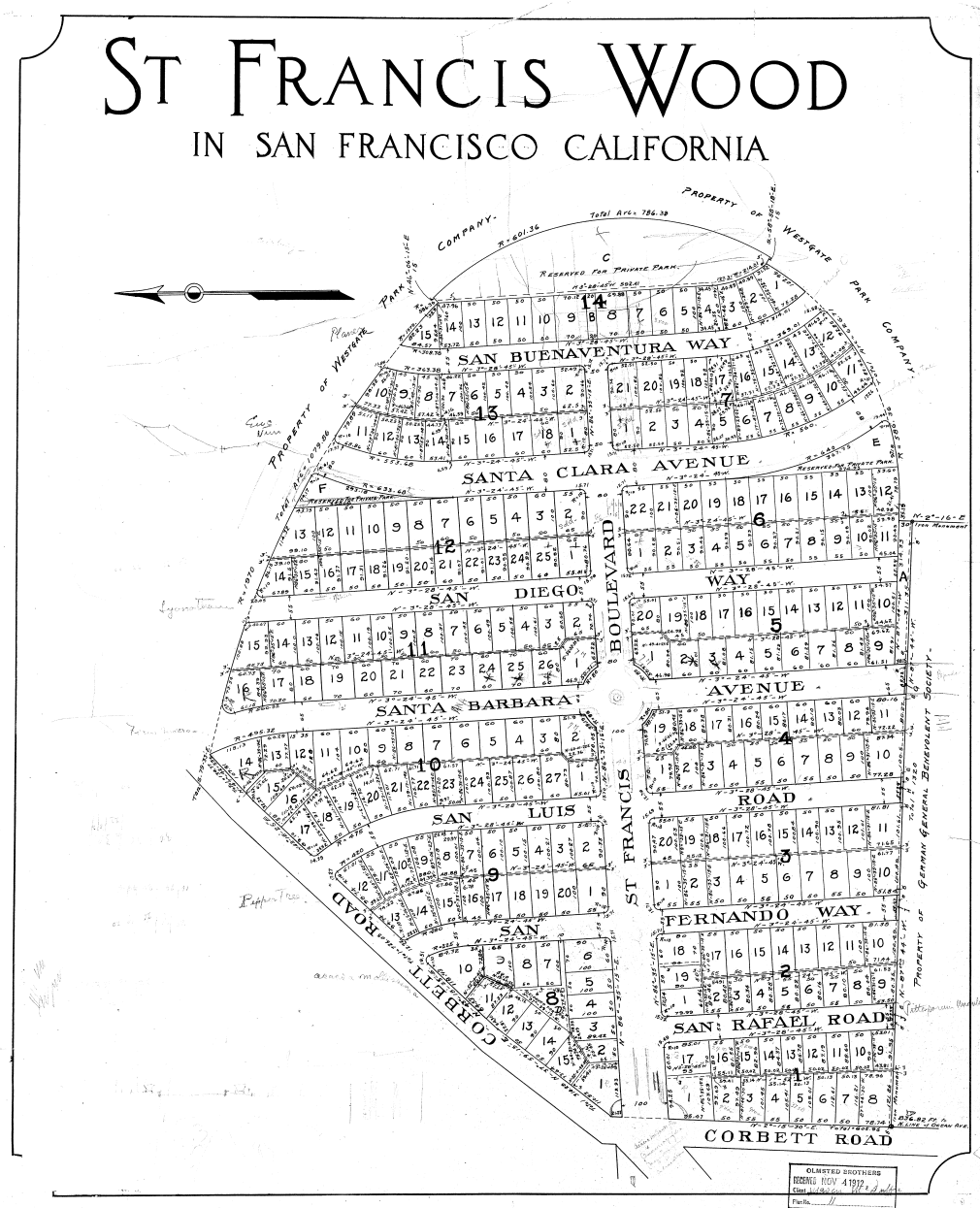


Figure 4.18: Plan of St. Francis Wood in San Francisco, 1912. Initial design for the subdivision was completed by Mason-McDuffie with streets laid out with the topography. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

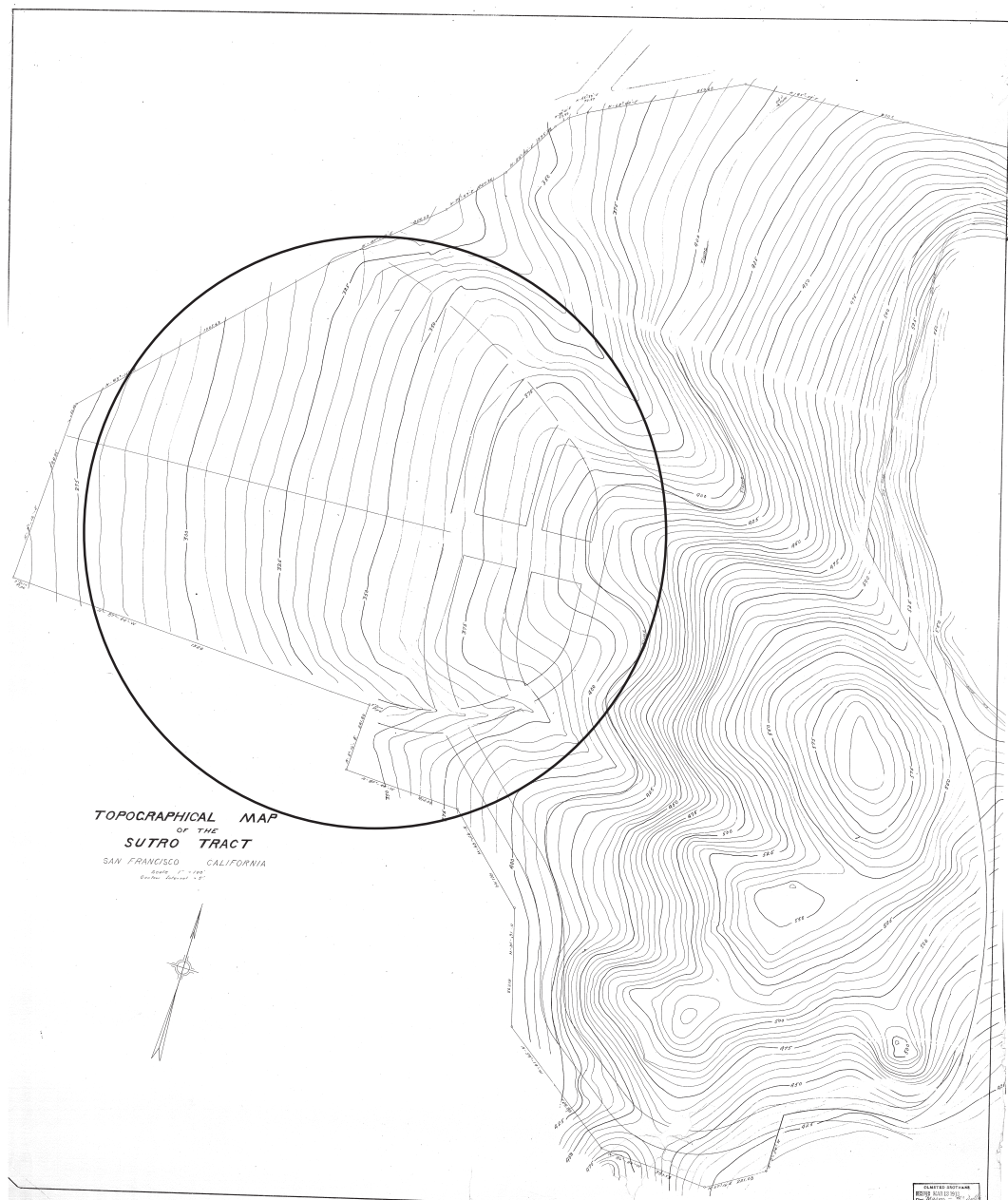


Figure 4.19: Topography Map of the Sutro Tract, 1913. Circled area shows the location for the original site plan of St. Francis Wood. Rather than following the grid of the adjacent streets, Mason-McDuffie oriented the plan to follow topography. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

It must have been surprising for the Olmsted firm to receive a rich ecological report from McDuffie, explaining his site to them. In much the same way that a landscape architect would have conducted site analysis, McDuffie related the site history, its relationship in context to adjacent developments, its setting in the western slopes of Blue Mountain Twin Peaks and Mount Davidson, with a topographic slope of “uniform grade of 7%.” He wrote about the climate with its wind and fog, the trees planted in Sutro’s forest, and how he wished the character of the new design to work with the topography, adding larger lot sizes for ample sunlight and air for homes. McDuffie also discussed the issues of transportation and infrastructure, noting that Bion Arnold was the consulting engineer for a tunnel under Twin Peaks which would link the new development by car line to downtown San Francisco. Interested in new planning models, McDuffie wanted to separate the residential streets from main thoroughfares to reduce speeds with respective land use.⁶¹ And like Torrance, it was modeled after a Garden City approach.

Fred Dawson was the principle contact on this project and made a site visit in August 1913. In his report, Dawson described how the topography was divided into three natural divisions: a wooded tract, irregular ground near the Twin Peaks Tunnel Portal, and steep hillsides alternating with level ridges, all with views onto the ocean or inland country. Dawson again recounted the existing infrastructure and transportation systems and then addressed the “distinctive features,” the *genius loci* qualities for which the firm was known to focus their design. McDuffie’s symmetrical layout in the original subdivision design was well-founded as Dawson wrote, “this ease of approach from every quarter is evident on a mere glance of the plan, but there are several other features in the design, less obvious to the ordinary reader, which are seldom found in real estate developments of this sort, and which will ensure certain fundamental advantages to all the residents of St. Francis Wood.”⁶² McDuffie’s consortium created an “entire road system...planned to fit the topography” (Figure 4.20). The roads gently curved at comfortable grades, bringing the “intervening lots on the most commanding sites [which] afford them the most finest natural setting.” The street system as planned separated wide main thoroughfares from more narrow, quiet residential streets, with the additional advantage of “greater picturesqueness

⁶¹Duncan McDuffie to the Olmsted Brothers firm, Report, 10 September 1912, [Westlake Park Land Co.], #5658, O.A. Papers.

⁶²James Frederick Dawson, “St. Francis Wood, Westgate Park, San Francisco, California, by Olmsted Brothers, Landscape Architects, Brookline, Mass,” Report, August 1913, [Westlake Park Land Co.], #5658, O.A. Papers.

and variety of the street views, which is still further enhanced in the present instance by devoting the space saved from the roadways to parking strips for ornamental planting.”⁶³

Furthermore, McDuffie had doubled the typical lot size of most residential subdivisions, with a dedication of eight acres, or 5% of the community, to a generous provision of parks and recreational areas for the benefit of the whole community. Dawson concluded his report describing the formal sequence from the entry to a large plaza at the top of the street:

This sequence, moreover has a double aspect; it at once forms a climax to the main approach and the formal scheme and a transition from that to the natural and rugged landscape. As such it affords an excellent example of the way in which the entire design seeks to bring all the existing natural conditions into association as parts of a co-ordinated scheme that combines in the fullest possible measure practical convenience and aesthetic effectiveness.⁶⁴

The Olmsted Brothers designed the remainder of the development over the course of the next four years, working with the new architect and Galen Howard protégée Henry H. Gutterson, whose career coincidentally had begun in the office of Grosvenor Atterbury, architect with the Olmsted Brothers at Forest Hills Gardens. Duncan McDuffie was an ideal client for the Olmsted firm and lifelong supporter and advocate of their values (Figure 4.21).

⁶³ James Frederick Dawson, “St. Francis Wood, Westgate Park, San Francisco, California, by Olmsted Brothers, Landscape Architects, Brookline, Mass,” Report, August 1913, [Westlake Park Land Co.], #5658, O.A. Papers.

⁶⁴ Ibid.

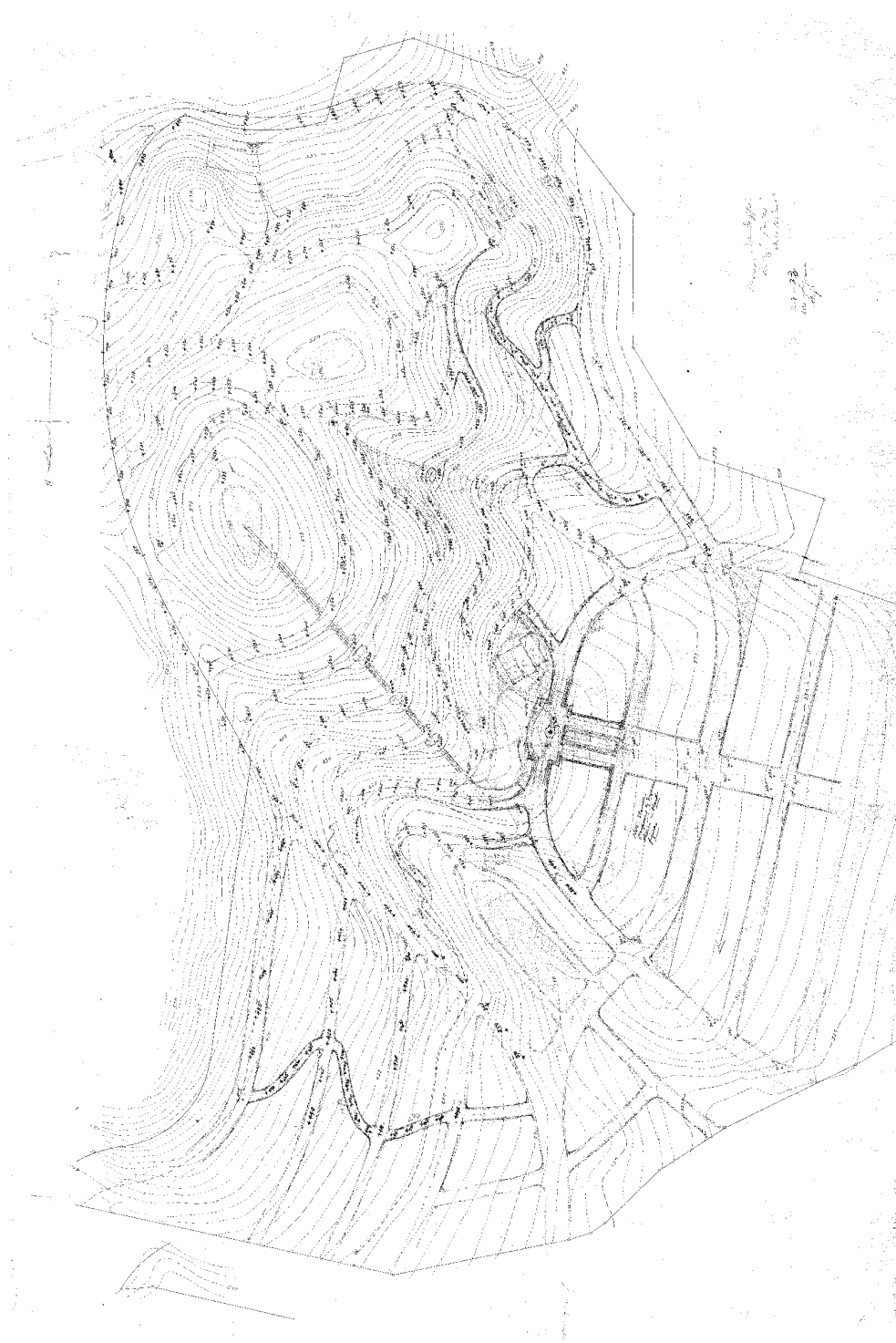


Figure 4.20: St. Francis Wood street layout, 1912. The Olmsted Brothers continued the street design in the community, carefully fitting the roadways to the existing contours. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site



Figure 4.21: Mature photo of St. Francis Wood, n.d. The lush design along with the sequencing of the design down the hillside worked in conjunction with the site's low water as well as topography. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

Lakeshore Highlands, Oakland, 1914

Embedded in the development community of the California Bay Area but a permanent East Coast resident, Fred Dawson lived a bicoastal life and met Walter Leimert in 1913 at the Harvard Club in New York City. By March 1914, Dawson wrote Leimert that the firm agreed to prepare plans for his Oakland, California subdivision and that he would be in California having just received another project in Los Angeles, the subdivision of 16,000 acres later called Palos Verdes Ranch. John Charles would develop plans from Brookline, while Dawson remained the client contact. Leimert sent a topography map of what was called the Sather Tract, with another map of Oakland in which green areas marked where there were existing parks, yellow areas where the city was considering acquiring lands, noting that at the heart of his property was a potential “park strip and drive-way.” Here Leimert wanted to design a connected park, linked to the city’s park and boulevard system.⁶⁵

An Oakland native, Leimert’s development company Walter H. Leimert Co. opened in 1902 with its owner’s intention of building subdivisions with sensitivity to the natural beauty and conditions of their sites. Leimert’s work in the Bay Area was bifurcated with development projects in Los Angeles and, like McDuffie, became a long-term client for the Olmsted Brothers. Lakeshore Highlands was designed and marketed as an ideal trolley suburb of modest and affordable homes and within easy access to San Francisco and Berkeley. In the 1920s, Leimert permanently moved his company to Los Angeles and developed Leimert Park and Rancho Malibu with the Olmsted Brothers as well as Beverlywood, Beverly Highlands, and Cheviot Knolls. His 1928 “Small Homes Exhibit” in Los Angeles was organized to promote model homes in Leimert Park and was marketed to “show YOU how you can ‘Live in the Park.’”

Like McDuffie, Leimert sent a report on the ecological conditions of the Lakeshore Highlands site. Trees in this tract had been mapped as a large portion of the land was eucalyptus and coast live oaks. Soils ranged from black loam to alluvial silt with shale rock formation throughout the property, the last a soil type, he noted, being unsuited for any shrub or tree growth. Aware of the Olmsted Brothers’ design of Forest Hills Gardens,

⁶⁵ Walter Leimert to Olmsted Brothers, Letter, 17 April 1914, [Lake Shore Highlands], #5945, O.A. Papers.

Leimert wrote that while he wanted to set aside land for a community club house and recreation purposes, “We do not care for any of the inclosed [sic] private parks, such as have been included in the Forest Hill Gardens subdivision.”⁶⁶ Transportation and street layouts were also noted, with Leimert adding that Dr. [Werner] Hegemann (who was currently in residence to recommend urban plans for Oakland and Berkeley) “seemed to favor the idea of eliminating any formal entrance feature such as gates or pillars, and substituting instead an inviting vista of several attractive residences, which would give passersby on Lake Shore Avenue a most favorable and alluring impression of the property.”⁶⁷

While the Olmsted firm had been consistently working in California since 1909, they were reminded by both Leimert and McDuffie to remember that the climate was semi-arid, and cautioned that planting of turf lawn in park strips was “a large amount of labor and sprinkling effect.” Lawns also were a year-round maintenance issue in California as Leimert added, “of course some work of maintenance must be continued throughout the entire year, as we have no snow in winter.”⁶⁸ The Olmsted firm was expert in winter conditions in other parts of the country, but this change of weather was an issue that affected street grades as the Olmsted Brothers firm constantly argued for reduced grades than Leimert’s requested 12-15%. While the Olmsted firm’s reputation was for site-specific design and ecological responsiveness, they found a strong critic in Leimert. He critiqued the initial Lakeshore Highlands plan as lacking a regional and vernacular sensitivity:

In our fitting your plan to the property and reading your report, it has occurred to us that perhaps you have not attached quite enough importance to preserving the existing beauty of what you call “an old ranch road” which on your plan is identical in location with Arroyo Road and Saddle Road...This old road is bordered on each side by large trees, and we think one of the features of the entire property. Had you actually the opportunity of being on the ground you would perhaps have made a little more of this circumstance than you apparently do on your submitted scheme. The trees near the junction with Cactus Road form a natural portal, of which opportunity your plan apparently does not avail itself. In fact, one of the rows of trees is destroyed by Arroyo Road,”

⁶⁶ Walter Leimert to Olmsted Brothers, Letter, 17 April 1914, [Lake Shore Highlands], #5945, O.A. Papers.

⁶⁷ Ibid.

⁶⁸ Walter Leimert to Olmsted Brothers, Letter, 24 August 1914, [Lake Shore Highlands], #5945, O.A. Papers.

adding that he was surprised that the plan did not include a scheme for the city park using the existing trees to border the road edge⁶⁹ (Figure 4.22). Needless to say, the Olmsted firm altered the Oakland design to better address existing trees and water, both in drought-tolerant plant use and site grading (Figure 4.23).

Duncan McDuffie and Walter Leimert were key early influences on the Olmsted Brothers in California, both developers collaboratively ensuring that design was sensitive to the ecological conditions of the site and preserved the existing topography and vegetation as much as possible. Parallel values connected these two men with the Olmsted firm, providing projects, contacts, and political entrée for the firm in California design and policy. And while the Olmsted Brothers were an expert design firm, the firm had made mistakes in applying their East Coast knowledge to a California project. Their understanding of California would need to be applied and tested in their next project in southern California at Palos Verdes.

⁶⁹ Walter Leimert to Olmsted Brothers, Letter, 24 August 1914, [Lake Shore Highlands], #5945, O.A. Papers.



Figure 4.22: Site for Lakeshore Highlands prior to development, 1914. Old ranch road seen in foreground within existing trees. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

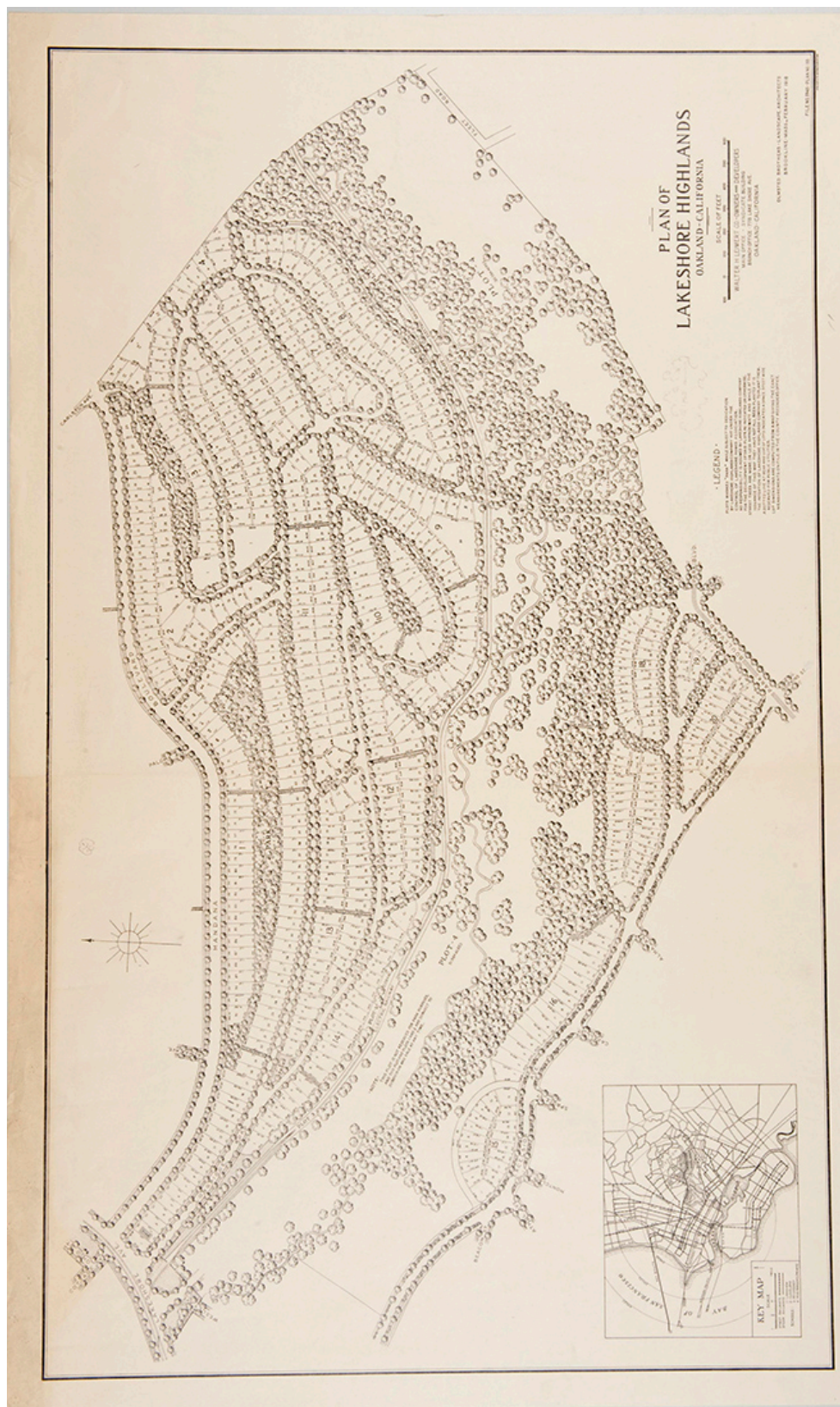


Figure 4.23: Plan of Lakeshore Highland, 1918. Final plan maintained a park at the bottom of the site, followed topography, and allowed for open space. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

CHAPTER SUMMARY

Most cities in early 20th century California had little infrastructure compared to older cities on the East Coast and Southern United States. While this position offered the Olmsted firm opportunities to test some more radical ideas, especially with regard to water use, the semi-arid conditions of California required the Olmsted firm to shift some of their approaches in design. No longer reliant on year-round precipitation, irrigation would look to non-potable sources such as rainwater, salt water, and even treated sewage. While some usual typologies remained, such as models like Garden Cities, city planning, and roadway design, new typologies would also need to be developed and reconsidered such as parks. The use of turf lawns, for example, was either reduced or designs relied on native grasses in keeping with the regional climate. Lack of snow allowed roadway design to take steeper grades than elsewhere. The developers Duncan McDuffie and Walter Leimert, with whom the Olmsted Brothers initially collaborated, were ideal relationships, fostering a shared interest in ecological sensitivity, while also establishing a long-term relationship for which the firm would profit over the course of the next 40 years in California.

CHAPTER 5

PLANNED COMMUNITY DESIGN:

PALOS VERDES ESTATES, 1914 - 1931

The twenty-five square miles of the Palos Verdes Hills form a bold isolated mass, rising tier above tier to nearly 1500 feet above the surf-washed base of the cliffs which mark a projecting “knuckle” in the coast of California at the southwest corner of the Los Angeles plain...The hills are an upthrust and contorted mass of lime-shales and kindred rocks, with a surface soil of deep and rich adobe broken by rock outcrops and with loose scatterings of the hard laminated field stone that makes such an interesting material for steps and walls and flagstones.¹

Frederick Law Olmsted, Jr., 1927

I enclose herewith an article from last Saturday’s Express which gives you some idea of the general attitude towards the entire project now [that] it has developed from private enterprise into essentially a big public movement, taking the lead in the development of future Greater Los Angeles.²

E.G. Lewis letter to the Olmsted Brothers, 1922

¹ Frederick Law Olmsted, Jr., “Palos Verdes Estates,” *Landscape Architecture* 17, no. 4 (1927): 255.

² Edward G. Lewis to Olmsted Brothers, Letter, 19 July 1922, [Palos Verdes], #5950, O.A. Papers.

Palos Verdes Estates became the largest new town designed in the 1920s. Conceived as a totally planned community, its careful design was formulated by the Olmsted Brothers as Directors of Design along with city planner Charles Cheney and architect Myron Hunt. Eventually known as the Palos Verdes Ranch Project, it became the most extensive suburban community commission the Olmsted Brothers firm ever undertook with an initial design of 16,000 acres. The Olmsted Brothers began this project in 1914 continuing as advisers through 1948, a testament to the important relationship secured by the Olmsted Brothers for their design. The commission of Palos Verdes followed on the heels of short, but intense, research the firm had completed in 1910 - 1911 in San Diego in preparation for a design for the Panama-California Exposition. St. Francis Wood in San Francisco was near construction and Lakeshore Highlands was another community design about to begin in Oakland, yet both Northern California projects were significantly smaller in scale than the extensive Palos Verdes site. Torrance, another Olmsted Brothers design, was a mere four miles from the new site and while it too would offer some familiarity with a Garden City approach in Southern California, Palos Verdes Estates was to be a high-class residential development, exclusive of any industrial land use. While developer Frank Vanderlip considered the project to be speculative, for the Olmsted Brothers, especially Frederick Law Olmsted, Jr., it became a long-term experiment for semi-arid design and would offer a model of development in Southern California. The conundrum of site intervention in Los Angeles would have to be solved in new ways from their previous practice—in water use, infrastructure, use of open space, planting, and community planning.

The longevity of the design process at Palos Verdes affords a rich collection of correspondence, illustrative plans, and photographs, offering a comprehensive record from its initial site analysis to full development of the community. This chapter analyzes the rigor and scientific approach to site analysis by the Olmsted Brothers, employing a methodological process fundamental to current landscape architecture practice. Frederick Steiner's 21st century site survey inventory from *The Living Landscape: An Ecological Approach to Landscape Planning* is employed as an analytical tool as this chapter demonstrates the Olmsted Brothers' prescient process of understanding the natural and cultural systems of a site prior to any design. The Olmsted firm used the site analysis to generate a design vocabulary that was site-responsive and peculiar to the specific conditions of the landscape. Palos Verdes Estates was an unusually sustainable

development for its period and its focus on connected green spaces added green infrastructure to the 1920s' project. Frederick Law Olmsted, Jr., in particular, was able to test techniques of early ecological planning in his Southern California practice, and his landscape designs and policy recommendations from the 1920s offer opportunities for evaluating its relevance for landscape architects addressing current challenges in semi-arid regions of Southern California.

HISTORIC CONTEXT OF PALOS VERDES

Located in south Los Angeles County between Redondo Beach and San Pedro, the site for Palos Verdes has a storied land-use history: from Native American villages to a Spanish rancho, and home to Portuguese whalers and Japanese farmers (Figure 5.1). However, even with centuries of diverse land occupation, the landscape was still largely undeveloped by the early 1900s. The Santa Fe Railroad extended to nearby city Redondo Beach by the 1880s, bringing business as well as newly arrived East Coast residents to the area, but it was not until 1912 that New York banker Frank Vanderlip and his wealthy syndicate of partners purchased the property for its spectacular ocean views (Figure 5.2).

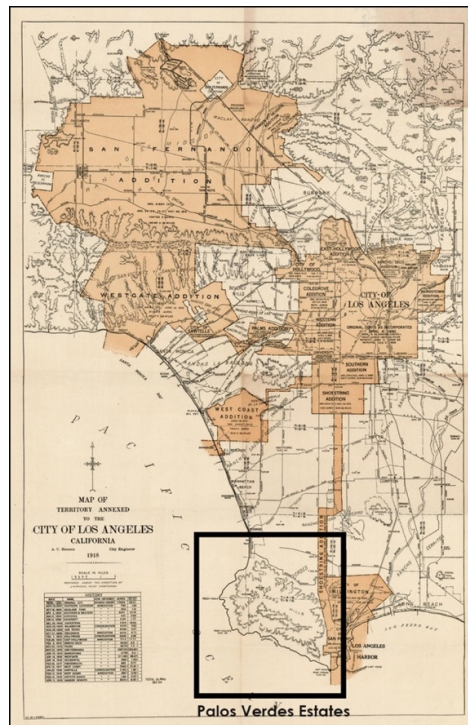


Figure 5.1: Map of Territory Annexed to the City of Los Angeles, 1918. Map, identifies location of Palos Verdes Estates in context of Los Angeles. Credit: Barry Lawrence Ruderman Antique Maps, Inc.

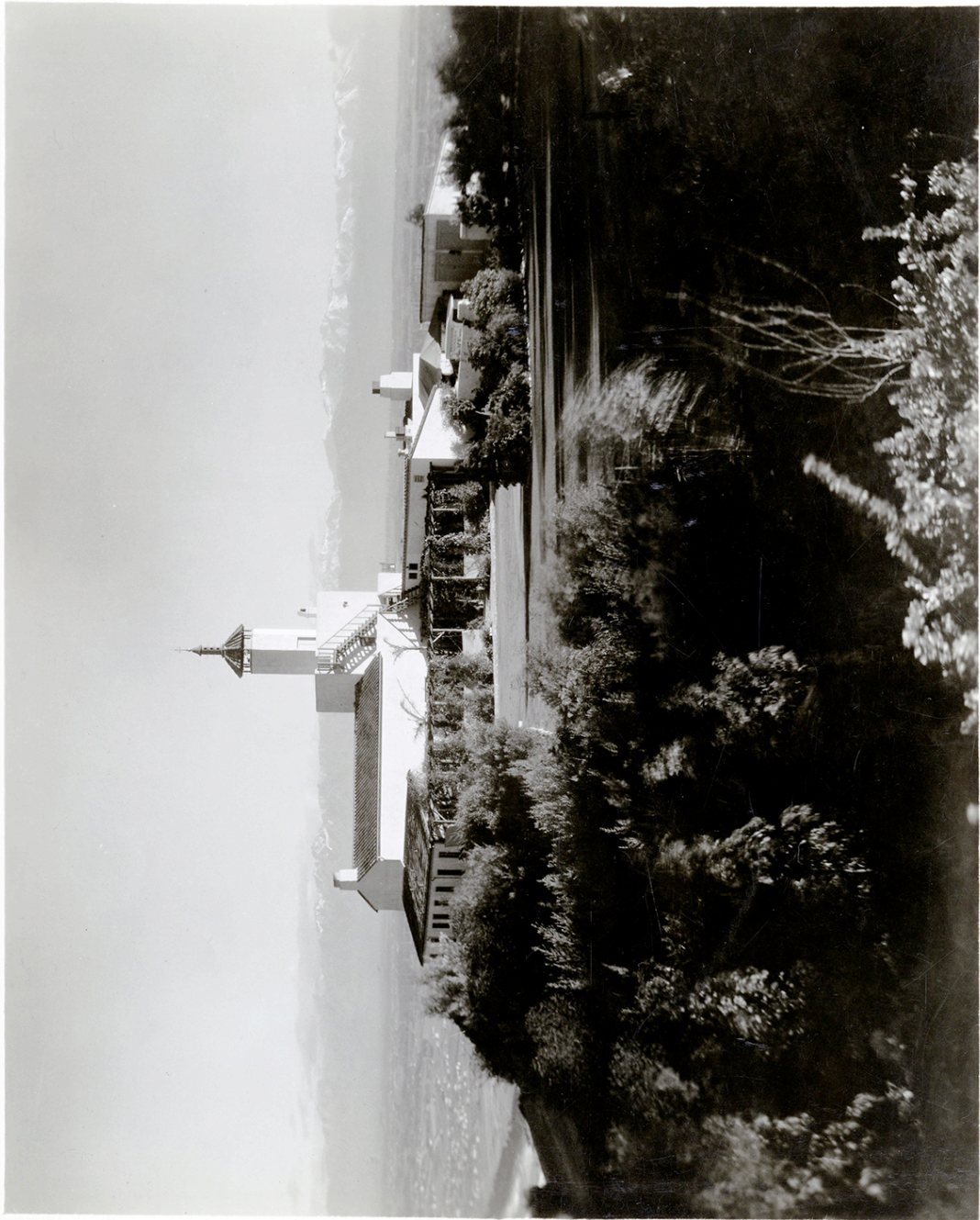


Figure 5.2: La Venta Inn (the Sales Office) and first building constructed at Palos Verdes, 1926, with views of Pacific Ocean and mountains. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

At age 63, John Charles had slowly reduced his travel to the West Coast beginning in 1913, while Fred Dawson remained the West Coast representative for the firm. The project was originally brought to Dawson, who personally knew Palos Verdes' developer Frank Vanderlip from prior work on Beechwood, Vanderlip's 147-acre estate at Scarborough-on-the Hudson, in Briarcliff Manor, New York. Vanderlip requested design advice for a proposed development of "high class residential lots" near Los Angeles. When Dawson wrote to John Charles about this opportunity, John Charles replied that he was unwilling to go to California "for this one job," and told Dawson to meet Vanderlip alone as this project would be his responsibility. With this type of project, oversight would typically last from perhaps one to four years and the firm lacked an official West Coast office. It was a hesitant beginning to what ultimately became a 34-year long project.

In building his design team, Vanderlip hired architects Myron Hunt and Howard Van Doren Shaw in 1914 to design a country club on the bluffs above Portuguese Bend on the southwest edge of Palos Verdes, and in 1916, Vanderlip built his own summer home as a demonstration of his commitment to the project. Though work slowed during World War I, accompanied by a general depression of American business, the Olmsted Brothers continued their research and road layout until April 1917, the last time John Charles was involved in the Palos Verdes design. Anxious to sell the land, the Vanderlip syndicate liquidated the Palos Verdes Ranch holdings to Edward G. Lewis, a developer known for building Atascadero, California. Lewis bought and managed the development from 1921 - 1923, renaming it the "Palos Verdes Project." Important to the outcome of the design, Lewis brought Charles Cheney, a city planning expert, who had helped him develop a City Beautiful scheme in Atascadero. When E.G. Lewis was unable to raise \$35 million to begin construction at Palos Verdes Estates he resigned, with Vanderlip resuming leadership of the project in 1923, and once again, the necessary development funding. The Olmsted Brothers, Cheney, and Hunt remained as consultants and their previous work began to see large effect by the mid-1920s.

DESIGN INSPIRATIONS AND ASPIRATIONS

Olmsted Brothers, Directors of Design

Beginning in 1914, the field research for Palos Verdes included all 16,000 acres of the property. The firm already had experience in Southern California, but the opportunity

presented by the Palos Verdes community was approached with new methods. From 1914 to 1922, Olmsted, Jr., and other members of the firm traveled between California and Massachusetts, with most of the initial drawings completed at the Brookline office. With the title of Directors of Design, the Olmsted Brothers firm was responsible for “directing, organizing, coordinating and expediting the preparation of all plans for the subdivision,” including design of all roadways and establishment of an on-site nursery.³ John Charles’ early contribution to the project was cut short by a work stoppage during World War I and his death from cancer in 1920. By October 1921, Frederick Law Olmsted, Jr. assumed leadership of the project and helped advance the design until 1931.

In 1923, Olmsted, Jr., and Fred Dawson relocated to the community, living there while it was being developed in a unique arrangement for the office during this period. This major stipulation by Frank Vanderlip was different from any other previous project by the firm and one that would have a great effect on the outcome of the design:

During the continuance of this contract at least one member of the firm of Olmsted Brothers shall at all times be resident at or near Palos Verdes available for service and in responsible charge of work and Frederick Law Olmsted and James F. Dawson shall both be so resident and available for as much of the time and as continuously as they find necessary for the proper direction and prosecution of the work.⁴

The firm had opened a West Coast office in October 1922 to accommodate its growing list of Southern California projects, but never had firm principals been permanent residents of their own project.⁵ Through this tenancy, Olmsted, Jr. combined professional and personal values into the design of a community that became his home, and a design in accord with the site’s Mediterranean ecology. His residence in Palos Verdes during the 1920s also enhanced his understanding of Southern California’s regional ecology, culture, and politics—an understanding that would have great importance for other major projects in the decades to come. Capturing the promise as well as issues of Southern California, Olmsted, Jr. wrote “Notes on the Palos Verdes Project,” 1922:

³James Frederick Dawson to W.H. Kiernan, Letter, 20 January 1914, [Palos Verdes], #5950, O.A. Papers.

⁴Ibid.

⁵ Draft of Proposed Contingent Agreement between Olmsted Brothers and the Trustee, 9 October 1922, [Palos Verdes], #5950, O.A. Papers.

In taking up again the active development of the Palos Verdes tract, some seven years after Mr. Vanderlip suspended our work on it because of the War, I am profoundly impressed, all over again, with the amazing growth of the Los Angeles district. But I am not astonished.

Strike conditions gave me plenty of leisure to reflect upon climatic conditions and the migration of peoples as my train stalled along, day after weary day, through a thousand miles of desert. Back of that desert I had just traversed a far greater width of the populous Mississippi basin—in midsummer. Vastly productive of population and of wealth, its appeal as a place to live and enjoy life, puts it more on the class with the desert than with the Coast.

It is no wonder that an endless and constantly augmenting stream of those who have earned the opportunity of living in a place of their own choosing—a place where life is worth living for itself and not merely as the nearest means of getting bread and butter—pours year by year across the mountains and the desert.

For similar reasons a great stream pours also to the Atlantic Coast. Even in my time hundreds of miles of Atlantic Coast line has become densely occupied by people seeking pleasanter living conditions than prevail throughout the great productive inland mass—but it is to the West Coast that the great tide sets. It is needless to say why.

And everywhere that these great tides flow, East or West, the seekers after their heart's desire—a perfect place to live and enjoy life—too often meet the same experience. Seeking the places most attractive by nature, piling into them thousands after thousands without constructive forethought beyond the common impulse that moves them all, their very numbers begin to distill the poison that blights the paradise they seek. Conflicting ideals, the spirit of everyman for himself and the devil take the hindermost, the crowding in of new comers from the endless stream, trying to squeeze in, regardless of the amount of standing room, wherever the attraction is greatest until the attractiveness is killed, and the temptation to exploit the community destructively for private gain wherever the spirit of everyman for himself prevails—everyone with half an eye has seen these things at work, blighting one fair hope after another.

Palos Verdes is a bold, inspiring, deliberate attempt to face this problem squarely, and to conquer it. If the best brains and persistent honest effort we possess, with eyes wide open to the dangers and difficulties of the problem, can solve it to the lasting satisfaction of the thousands who are eager for the best solution humanly attainable, then it will be solved at Palos Verdes. A virgin tract of twenty five square miles, with every advantage of climate, coast, and lofty intricate hills, planned, guided, controlled from the very start

with the sole exclusive object of making it and keeping it, as a great cooperative enterprise, the pleasantest place to live that it can possibly be made. If we be not rogues or fools, and if adequate financial means come fully forth—as they have been coming—the thing can be done as it never has been done in the world before.

And the stream of countless thousands continues to flow across the mountains and the deserts, seeking blindly, not knowing how to get it, for their heart's desire—a permanently satisfactory place to live and enjoy life.⁶

Charles Cheney, Consultant in City Planning

Charles Cheney was educated as an architect at University of California, Berkeley, and spent three years at the École des Beaux Arts in Paris. He traveled extensively in Europe and practiced in San Francisco. As an outspoken critic of the development of Los Angeles in the 1920s, Cheney planned for Palos Verdes to be a residential neighborhood with more open space, better recreation areas, and a careful control of architecture.⁷ His role in design was to work in consultation and collaboration with the Olmsted Brothers, in general planning, preparation and regulation of zoning plans, special restrictions and covenants for improvements, and the appearance of architectural design in consult with the project structural engineer J.J. Roth.⁸

Cheney would help develop Palos Verdes' villages, mixing Mediterranean prototypes with new American planning models.⁹ Though in collaboration with the Olmsted Brothers on Palos Verdes and other later projects in Los Angeles, their relationship would often be contentious.¹⁰

⁶ Frederick Law Olmsted, Jr., "Notes on the Palos Verdes Project," 1922, [Palos Verdes], #5950, O.A. Papers.

⁷ See Henry F. Withey, "The Work of Charles Henry Cheney, Architect and City Planner," *The Architect and Engineer* 53, no. 3 (June 1918): 39.

⁸ Draft of Proposed Contingent Agreement Brothers and before the decisions are made." between Olmsted Brothers and the Trustee, 9 October 1922, [Palos Verdes], #5950, O.A. Papers.

⁹ Charles H. Cheney, "Palos Verdes: Eight Years of Development," *The Architect and Engineer* 100, no.1 (January 1930): 35.

¹⁰ See their contentious relationship in an office memorandum discussing the Contract between the Olmsted Brothers and E.G. Lewis which notes in Item 2 the level of design control that the Olmsted firm preferred and the strained relationship they would maintain with Charles Cheney, Contract between the Olmsted Brothers

Myron Hunt, Chief Architect

Myron Hunt was born in Massachusetts, and after studying at MIT between 1890-1893, he was employed initially as a draftsman for Hartwell and Richardson in Boston. In order to research buildings of the early Renaissance, he spent 1895 in Florence, Italy, and returned to work for Shepley, Rutan and Coolidge to design Stanford University. Working under the tutelage of this latter firm, Hunt was taught an important principle of closely relating buildings and landscapes, a characteristic he would include in his personal practice.¹¹

When Hunt moved to California in 1903, he was one of the few local practitioners in the region who had attended architectural school. None of the men practicing in then thinly-populated Los Angeles had knowledge of Mediterranean architecture, let alone studied in Europe.¹² His partnership with Elmer Grey in 1904 began a career of developing a distinct regional style which matured in the 1920s.

and E.G. Lewis with Dawson, Percival Gallagher and Vincent Hubbard in agreement, 15 October 1922, [Palos Verdes], #5950, O.A. Papers.

“The other point was the question of the statement of our relations with Mr. Cheney. Dawson and Hubbard feel quite strongly that whether or not Mr. Cheney always puts the interest of the job ahead without sufficient thought and to assuming knowledge and authority which he does not possess and that it would be a mistake to enter into a contract which failed to restrict absolutely as far as possible his activities which must in the nature of things be somewhat indefinite.

We feel that as to the actual things which he is called on to do, we cannot improve the statement in the contract. But we do not like the statement which says in effect that he shall have the duty of reporting first to Olmsted Brothers, and then if not satisfied, reporting with Olmsted Brothers to Lewis anything in Cheney’s field which seems to Cheney to be going wrong from the point of view of the carrying out of the terms of the trust. We do not see why he should have a power of this kind which we believe he would be sure to use in a way which on the whole would not be for the good of the job. We do not see why he will not have absolutely an open chance to state his opinion while he is collaborating with Olmsted Brothers and before the decisions are made.”

¹¹ Jean Block, “Myron Hunt in the Midwest,” *Myron Hunt, 1868-1952: The Search for Regional Architecture*, Exhibition catalogue organized by Baxter Art Gallery (Santa Monica: Hennessey and Ingalls, Inc., 1984), 9.

¹² Alison Clark, “Myron Hunt in Southern California,” *Myron Hunt, 1868-1952: The Search for Regional Architecture*, Exhibition catalogue organized by Baxter Art Gallery (Santa Monica: Hennessey and Ingalls, Inc., 1984), 23, 53.

The word “California Architecture” was first used in Palos Verdes to describe the architectural design which was an eclectic combination of Mission, Spanish, Italian, and Mexican typologies. Unlike Balboa Park, San Diego in which Spanish Colonial architecture was symbolically used to identify the city with its Hispanic past, a resurgence of American patriotism after World War I deemed “Californian” more American than Hispanic.¹³ Architecture that reflected the climate and region was a common approach with both conservative as well as avant-garde architects in Los Angeles such as Greene and Greene, Frank Lloyd Wright, Gordon Kaufmann, and Rudolf Schindler.¹⁴ With California Architecture, not only did the spaces of the homes showcase indoor/outdoor connection and prolific use of patios, but the symbolic combination of Mediterranean design into a unique California style of architecture captured the spirit of the new region. Thomas Gates notes that in Palos Verdes Estates, the designers envisioned an “imagined historic California that could be created and its picturesque image marketed and sold to the upper class for whom the community was planned.”¹⁵ Hunt’s philosophy of uniting the building with the landscape, his desire to design a unique architecture specific to the region, made his partnership with the Olmsted Brothers a strong joint venture.

Frank Vanderlip, the Client

Frank Vanderlip was born in Illinois, spent his childhood growing up on a farm, studied finance, and eventually rose to an appointment as Assistant Secretary of the Treasury by President McKinley in 1897. President of National City Bank, he was a millionaire by 1910, rooted in a cultured and political life in New York. Vanderlip’s purchase of Palos Verdes Estates was strategic and speculative in that it was the last undeveloped piece of coast in the rapidly growing Los Angeles region.¹⁶ Having purchased the land sight unseen, Vanderlip described his first visit to his investment:

¹³ Palos Verdes Art Jury Minutes, for consideration of “Types of Architectural Styles for Projects,” 17 January 1923, [Palos Verdes], #5950, O.A. Papers.

¹⁴ See Greene and Greene’s Gamble House (1908), Pasadena; Frank Lloyd Wright’s Hollyhock House (1919), Los Angeles; Gordon Kaufmann’s Milton Getz house (1926), Beverly Hills; and Schindler’s personal residence (1924), Hollywood for further examples.

¹⁵ Gates, “The Palos Verdes Ranch Project.”

¹⁶ Morgan, *The Palos Verdes Story*, 8.

The road over which I drove as I filled my eyes with a first sight of Palos Verdes Ranch was the corridor of one of the most exciting experiences of my life. Before me lay a range of folded hills, miles and miles of tawny slopes patched with green, thrusting themselves abruptly from the Pacific. Above me were broad natural terraces, with here and there a little farm, backed by a range of taller hills. Wherever the road passed over a hillcrest I could see the shore-line of the ranch as a series of gold headlands spaced off by gleaming crescent beaches. I found myself reminded vividly of the Sorrentine Peninsula and the Amalfi Drive: Yet the most exciting part of my vision was that this gorgeous scene was not a piece of Italy at all but was here in America, an unspoiled sheet of paper to be written on with loving care.¹⁷

Vanderlip originally intended the Palos Verdes Project as a high-priced residential community on sizeable lots, with the northern portion of the land sold off in large 100-500-acre tracts for farming or subdivision development, but World War I prevented him from completing his plans.¹⁸ Upon resuming the project after the war, and having personally visited Palos Verdes in 1916, he began to formulate a revised plan for a unique residential colony based on Mediterranean design, likening the geographical location to Italy where he spent his vacations. His new concept was still an upper-class development, but was re-envisioned as an artists' colony, based on authentic Italian hillside villages. His own home was to be a large villa resembling the Italian Villa Papa Julio, built by Pope Julius III.¹⁹ Vanderlip's aims of a well-conceived Mediterranean design matched the vision of the Olmsted Brothers, Charles Cheney, and Myron Hunt, making his patronage and vision integral to the original design of Palos Verdes Estates.

Regional horticulture practitioners

Other disciplines were also carefully studying the California landscape at this time, both in appreciation of the climate and native plants. English expatriate Theodore Payne moved to California in 1893 and enamored with its flora, opened the first California native plant nursery in downtown Los Angeles in 1903, specializing in seeds, bulbs and container plants. Nursery owner and garden designer Kate Sessions of San Diego was also an

¹⁷ Frank A. Vanderlip, *From Farm Boy to Financier* (New York: D. Appleton-Century Company, Inc., 1935), 250.

¹⁸ James Frederick Dawson to John Charles, Letter, 3 July 1914, [Palos Verdes] #5950, O.A. Papers.

¹⁹ Morgan, *Palos Verdes Story*, 10.

advocate for California native plants. Acknowledging the semi-arid climate of Southern California, her garden designs substituted high-water turf lawns with native plant groundcovers such as at the San Diego residence of George Marston in 1905. Both Payne and Sessions had been consulted by the Olmsted firm for regionally appropriate plants for the Panama-California Exposition. These horticultural consultants assisted the firm in developing a plant palette that would showcase the authentic California landscape.

INVENTORY AND ANALYSIS OF THE BIOPHYSICAL ENVIRONMENT

Ecological research of the landscape prior to design began as early as the late 19th century. The pioneering practitioners Olmsted, Sr., Horace W.S. Cleveland, and Charles Eliot carefully studied the natural systems of their project sites, and used the resulting knowledge of topography, soils, water, and vegetation in their planning and design of park systems and other landscapes. A partner in the Olmsted firm, Charles Eliot brought an increased scientific rigor to the evolving discipline of landscape architecture. He argued that the scope of landscape architecture included agriculture, forestry, gardening, engineering, and even architecture. In Eliot's work for the Metropolitan Park Commission in Boston from 1893 - 1897, the plans for Boston's regional "scenic reservations" that Eliot developed depended to a greater degree than any previous park project on field research and technical investigations of the scientific details of a range of characteristic landscape types around Boston. Summarizing the physical and historical geography of these regions, Eliot used photography and field notes to document the geology, vegetation, and hydrological systems of the proposed landscape reservations. He was also fully aware of the human impacts on these natural systems. He developed botanical lists which he noted would "interest all botanists to watch for the possible return of many long since evicted plants," and observed that "the wild birds and animals of the reserved and protected woodlands have already greatly increased in number."²⁰ Eliot was aided in his forest surveys by the firm's young assistants Warren Manning, Percival Gallagher, James Frederick Dawson, and Charles Wheeler, landscape architects who incorporated these techniques

²⁰ Eliot, *Charles Eliot*, 680.

into their own work. Scientific analysis of the landscape was a normative practice and part of a landscape architect's training in the Olmsted firm.

These prescient ideas from the late 19th century continue to be relevant in modern landscape architecture practice. In many ways, landscape architect and ecological theorist Frederick Steiner provides a modern evaluative method for systematically surveying sites prior to design in order to create sound function with their ecological conditions. In Steiner's *The Living Landscape: An Ecological Approach to Landscape Planning*, he dedicates the chapter "Inventory and Analysis of the Biophysical Environment" to a listing of elements that provide a basis for investigation: regional climate, microclimate, terrain, soils, vegetation, water, geology, wildlife, and existing land use and users.²¹ Using the assessment methodology provided by Steiner, a critical analysis demonstrates the scientific approach to Palos Verdes' site design. Over the course of 20 years, firm documents revealed the way the Olmsted Brothers integrated ecological principles into their landscape architecture practice. And through the Olmsted Brothers' systematic research process, the ecology of the site was explored to ensure that land use appropriately matched the site.²²

METEOROLOGY: REGIONAL CLIMATE STUDIES

The initial field research that began at Palos Verdes Estates in 1914 included regional climate and microclimate studies. That year, Fred Dawson contacted Los Angeles meteorologist Ford Ashman Carpenter and asked him to conduct a climatological survey of the site. Carpenter positioned a series of stations throughout the 16,000 acres and recorded the weather through thermometers, rain gauges, and hygrometers to study "rain

²¹ See Frederick R. Steiner, *The Living Landscape, a Second Edition: An Ecological Approach to Landscape Planning* (New York: McGraw Hill, 2000).

²² In 1914, Olmsted, Jr. was also working on another community design, Mountain Lake in Lake Wales, Florida and a study of the project correspondence also reflects initial in-depth ecological research prior to design. For this project, Olmsted, Jr. researched weather through reports from the local station of the U.S. Weather Bureau, underlying geography of the site and tested soils, desiring local pond "muck" for fertilizer. Recognizing his "handicap" of "limited knowledge of tropical and sub-tropical horticulture and agriculture," the firm experimented with native and hardy plants, and irrigation was limited to putting greens on the golf course. In keeping with site-specific approaches, he also required plans to "adapt construction details to local conditions." Frederick Law Olmsted, Jr., 17 February 1915, 29 July 1915, 30 August 1915, [Mountain Lake Corporation, Lake Wales Land Co.], #6081, O.A. Papers.

run-off, sunshine, wind direction and force”²³ (Figure 5.3). His research provided documentation of the rainfall and runoff issues that would affect the development, an area that typically received only twelve inches of annual rainfall. Agricultural use of the site had historically been un-irrigated through dry farming, with water needs met only by fog and annual rainfall (Figure 5.4). With a large community development, water needs would be far greater and would rely on newly drilled wells. The use of water for ornamental horticultural purposes, therefore, would need to be judicious. Dawson ordered reports of *Water Supply of Los Angeles* from 1909-1914 to understand water availability. The reply from William McKiernan, partner in the Vanderlip syndicate, was that Palos Verdes “would have to provide for their own water supply, for if they secured the water from the City of Los Angeles they would have to annex themselves to Los Angeles and the taxes would be prohibitive.”²⁴ In an effort to procure funding for this climate research, Dawson appealed to the syndicate’s project manager Jay Lawyer from a marketing perspective. “We believe that such assistance as Mr. Carpenter could give you in such a prospectus as he proposes to write on the climate conditions of Palos Verdes would be of great assistance to you in convincing prospective purchasers as to the climate of the Palos Verdes Tract. We think it would be a good advertising feature and would be well worth the \$1,100 which Mr. Carpenter proposes to charge.”²⁵ Needless to say, the Olmsted Brothers received the money.

TERRAIN: METICULOUS TOPOGRAPHY STUDIES

The design process developed by Olmsted, Sr. in the 19th century required detailed topographical surveys prior to design for almost all projects. This was another design principle that certainly applied in the case of a commission as significant as Palos Verdes.²⁶

²³ Ford Ashman Carpenter to James Frederick Dawson, Letter, 11 April 1914, [Palos Verdes], #5950, O.A. Papers.

²⁴ Conference between W.H. Kiernan and Messers. J.C. Olmsted, F.L. Olmsted and J.F. Dawson,” 3 June 1914, [Palos Verdes], #5950, O.A. Papers.

²⁵ James Frederick Dawson to Jay Lawyer, Letter, 29 April 1914, [Palos Verdes], #5950, O.A. Papers.

²⁶ Frederick Law Olmsted, Jr. wrote a comprehensive essay on the specifications for topographical maps used by the firm published in one of the first editions of the profession’s journal *Landscape Architecture*. Olmsted, Jr.’s specificity was intended to provide detailed instructions for other practitioners at the time. See Frederick Law Olmsted, “Specifications for Topographical Map,” *Landscape Architecture* 2, no. 2 (January 1912): 76-81.

A survey was conducted of all 16,000 acres, with contours measured at five-foot intervals. This was a remarkably detailed study of such a large area, but one considered necessary. A full and precise understanding of topography was essential to locate the alignment of roads and would influence all decisions regarding land use. The topographic maps were used in the office in Brookline together with the data on hydrology and soils. From this base of information, John Charles, Olmsted, Jr., and their associates developed road layouts that conformed to existing conditions to the greatest degree possible, while avoiding areas prone to erosion. The road system followed the site's natural contours, reduced the need for cutting and filling, while providing better views from the lots. There were economic as well as aesthetic purposes served by maintaining the existing topography as much as possible.

The attention to circulation design, which comprises the bulk of the Olmsted Brothers' drawings and studies for Palos Verdes between 1914 - 1919, underlines the importance of the automobile and its effect on community design. Los Angeles County had the world's highest per capita automobile ownership at the time. From the County Highway Commission, Dawson requested the proposed and existing boulevards between Los Angeles and San Pedro, just south of Palos Verdes, in order to connect their system of new roads into existing plans and to ensure cohesive regional circulation with their new town development (Figure 5.5 and Figure 5.6).



Figure 5.3: Monthly and Annual Reports of the Weather Service, Vol 1, July 1915 to June 1916. Location of weather stations to research the climate of Palos Verdes. Credit: Palos Verdes Library District Local History Collection

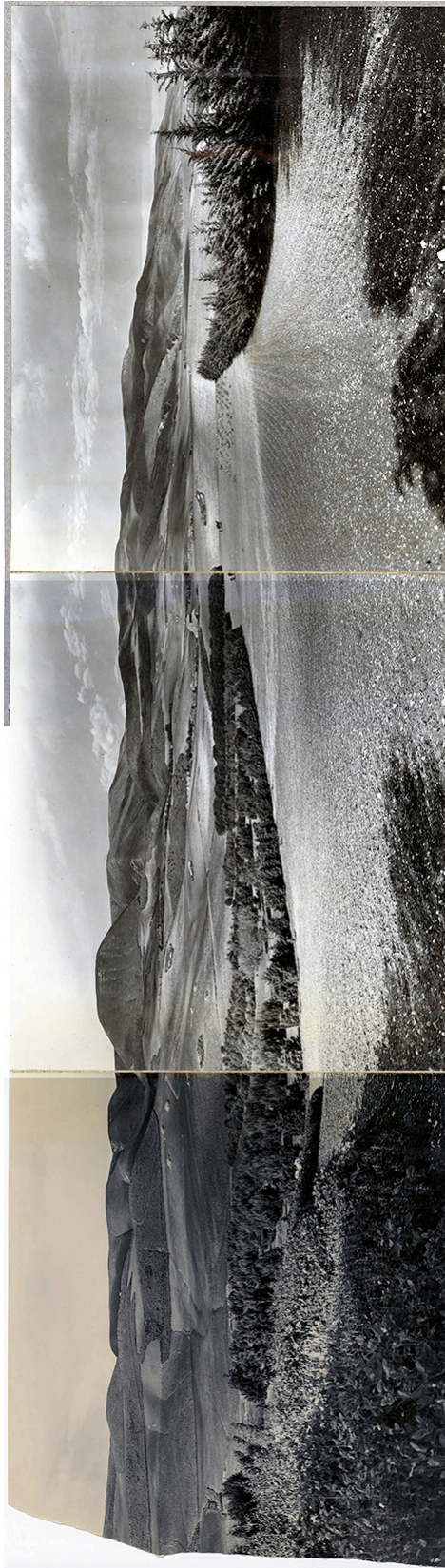


Figure 5.4: View of site prior to development, looking southwest, c. 1914. The landscape was largely grassland due to cattle grazing, agricultural use, and fires. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site



Figure 5.5: Study for Roads with Maximum Gradients on the Study 10%, 1914. Topography map developed from survey and the beginning of road layouts to fit the topography. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

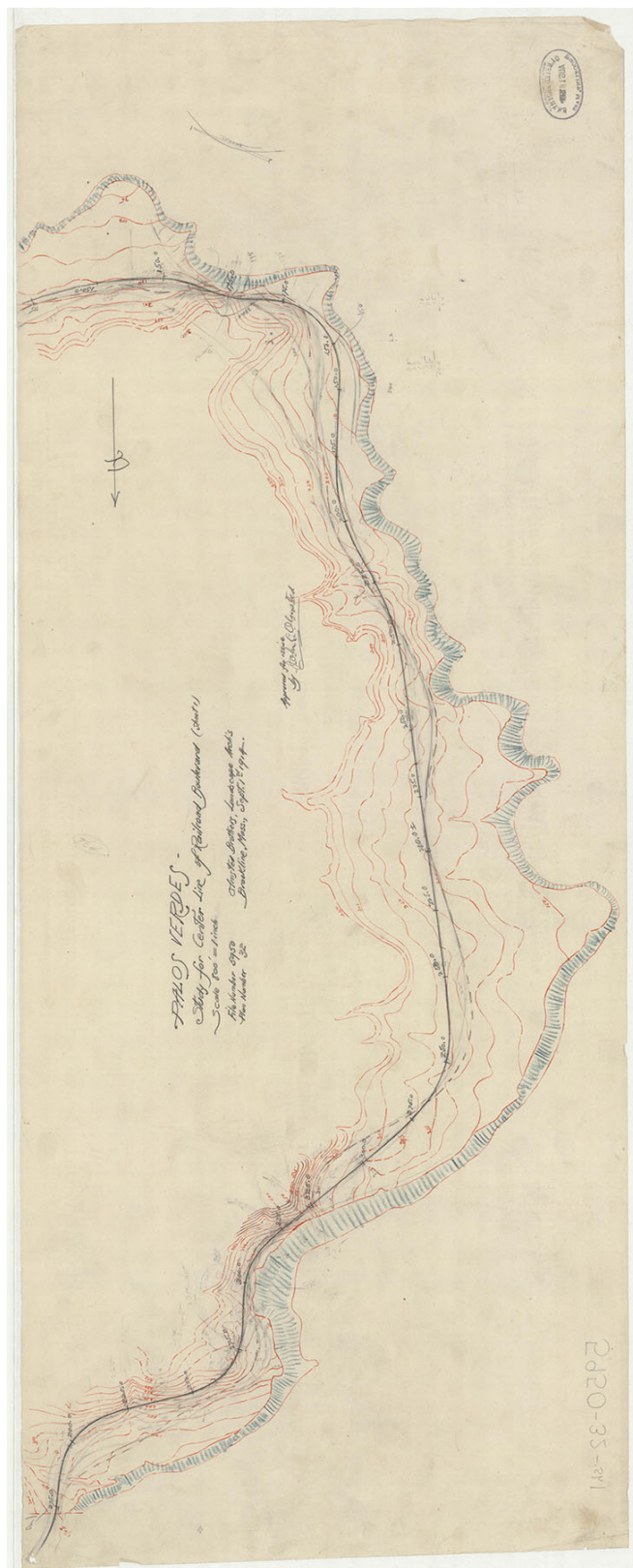


Figure 5.6: Study for Center line of Railroad Boulevard, 1914. Drawing which reveals the attention of contour studies to circulation design. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

The attention to circulation design, which comprises the bulk of the Olmsted Brothers' drawings and studies for Palos Verdes between 1914 - 1919, underlines the importance of the automobile and its effect on community design. Los Angeles County had the world's highest per capita automobile ownership at the time. From the County Highway Commission, Dawson requested the proposed and existing boulevards between Los Angeles and San Pedro, just south of Palos Verdes, in order to connect their system of new roads into existing plans and to ensure cohesive regional circulation with their new town development.

In addition to planning for vehicular traffic, John Charles proposed an electric railroad sited in the parkway median, with the local Red Car line to extend to the first commercial area in Palos Verdes, though this element was never constructed. Additional circulation was designed in pedestrian paths and bridle trails which were woven throughout the steep site and primarily kept pedestrians and horses separated from vehicular traffic (Figure 5.7).²⁷ Olmsted historian Arleyn Levee describes Palos Verdes' circulation system as one that gave a "rationale to the land." Levee argued that all roadway and path alignments were designed to consider grades, their effects on abutting property, and offered numerous scenic vistas, with some views simultaneously of distant snow-capped mountains and the ocean shore in the foreground.²⁸

SOILS: WORKING WITH NATIVE SOILS

Road design was developed both to match existing topography as well as soil types. As Carpenter set up his climatology studies, George T. Powell, an agricultural scientist who was a special advisor to the Secretary of Agriculture, also began consulting for the Palos Verdes project. Impressed by the "character, depth and fertility of the soil on the ranch," Powell noted that "depth of soil where the arroyos had formed and other evidences of erosion, whether by fresh water or salt." The agronomist examined the cultivation of the

²⁷ Olmsted Brothers to W.H. Kiernan, Letter, 9 October 1914, [Palos Verdes], #5950, O.A. Papers. See also Gates, "The Palos Verdes Ranch Project."

²⁸ Arleyn Levee, *The Olmsted Brothers' Residential Communities: A Preview of a Career Legacy* (paper presented at the conference The Landscape Universe: Historic Designed Landscapes in Context, Wave Hill, Bronx, New York, 1993).

soil in connection with the climatic studies being developed and reviewed rainfall charts to determine where it was possible to construct reservoirs.²⁹



Figure 5.7: Entry to Palos Verdes, 1925. Street designed to accommodate vehicular, equestrian, and pedestrian circulation. Credit: Palos Verdes Library District Local History Collection

²⁹This information was later noted in a report by Frederick Law Olmsted, Jr., Myron Hunt, H.T. Cory and Charles Cheney, "Report on Possibilities of Proposed Southwest Site on Palos Verdes Hills as a Location for the University of California, Southern Branch," 3 January 1925, [Palos Verdes], #5950, O.A. Papers.

VEGETATION: USE OF NATIVE AND HARDY PLANTS

Dawson's specialty was horticulture and he typically developed the firm's planting plans. Much of the Olmsted Brothers' prior work had been in Northern California and Dawson apparently was less aware of successful Southern California native plants. To complete the ecological research begun in 1914, the firm contacted California native plant expert Theodore Payne regarding the hardiness and suitability of particular regional plants to be used at Palos Verdes.

Propagation of plants suitable to the climate was begun with the establishment of an on-site nursery, and nurseryman Louis Horner was hired to propagate and care for the plants. In September 1914, Olmsted, Jr., wrote that the nursery stock was "chiefly of hardy natives of shrubs and trees for the aridity of the arroyos and precipitous sites which have become more or less bare and ugly in some places owing to pasturing, fires and other interference by man."³⁰ Seeds were purchased from Payne's nursery, and Horner also gathered seedlings in the wild. Through books and expert research, the firm developed plant lists specific to locations, such as ravines or hillsides, which had particular plant requirements. To determine the site-specific success of these plants, Horner conducted experiments in 1914 and 1915 to systematically propagate trees and other plants using lists provided by the firm. The Olmsted firm ambitiously had Horner test thousands of trees such as 2,000 ponderosa pine, 8,000 valley oak, and 6,000 California sycamore just to name a fraction of the inventory. Understory plants were also tried such as 100,000 Australian tea-tree and 150,000 laurel sumac. Horner's reports on his success at the nursery included the plant quantities and varieties planted in the field, as well as the proportion of those that survived, noting that the "oaks are also coming on well....The plants put out in the hills during the rainy season are at this writing doing well especially the small native material."³¹ Dry farming the seedlings was problematic for germination, so Horner moved water tanks, used by the former ranch on the site, to gather rainwater from the nursery building roofs, providing irrigation for his propagation experiments (Figure 5.8).³² The design and planting

³⁰Frederick Law Olmsted, Jr. to W.H. Kiernan, Letter, 25 September 1914, [Palos Verdes], #5950, O.A. Papers.

³¹Louis Horner to James Frederick Dawson, Letter, 5 July 1915, [Palos Verdes], #5950, O.A. Papers.

³²For full plant lists see Olmsted Brothers, "Propagating List of Trees for Planting Ravines and Hillsides," "Propagating List of Small Trees and Shrubs for Planting Hillsides and Ravines," "Propagating List for Avenue and Street Trees," 27 August 1914, [Palos Verdes], #5950, O.A. Papers.

of Palos Verdes quickly created a lush landscape of California native as well as other Mediterranean-based plants which were transplanted from the on-site nursery.

Existing trees were also rigorously preserved as part of the overall design. Prior to the developer's purchase of the land, the Bixby family had planted a grove of eucalyptus trees in the northern section of the property. Using these existing trees, the Palos Verdes plan created an entrance to the community described as a "sylvan gateway," consisting of vegetation rather than architecture. The entry road did not immediately head toward the ocean, nor to the community's central commercial area, but rather was directed to an open landscape where Olmsted, Jr. wanted visitors to have an "impressive demonstration where the view of the valley and hills and sea can burst upon them."³³ (Figure 5.9, Figure 5.10 and Figure 5.11)

LAND USE: MULTI-USE OPEN SPACE

The design for Palos Verdes Estates was based on a new concept at the time, planning ahead for growth, with idealism in planning a major goal of the design. The community was to be planned as a whole, every detail carefully considered for its ecological value, aesthetics, and advanced planning ideas. Olmsted, Jr. had copiously written and lectured on new town planning since 1910. By designing a new city in a region with little existing infrastructure, he had the opportunity to implement all his ideals from street and traffic systems, civic centers, public buildings and parks, to development of private property in a beautiful and functional design.³⁴ John Nolen, an Olmsted peer and city planner, wrote in *New Towns for Old* that "while existing cities require only conservative change due to their evolution, new towns should express new standards and new ideals, and be an attempt to meet in new ways the modern conditions of life and the peculiar opportunities that these conditions and resources offer." Nolen went on to describe Palos Verdes as a "complete and perfected plan of community development" encompassing all the planning ideals.³⁵

The initial development was laid out in five principal villages: Malaga Cove, near Redondo Beach; Margate, along the bluffs; Lunada Bay, stretching for three miles

³³Frederick Law Olmsted, Jr., Personal Notes, 9 January 1923, [Palos Verdes], #5950, O.A. Papers.

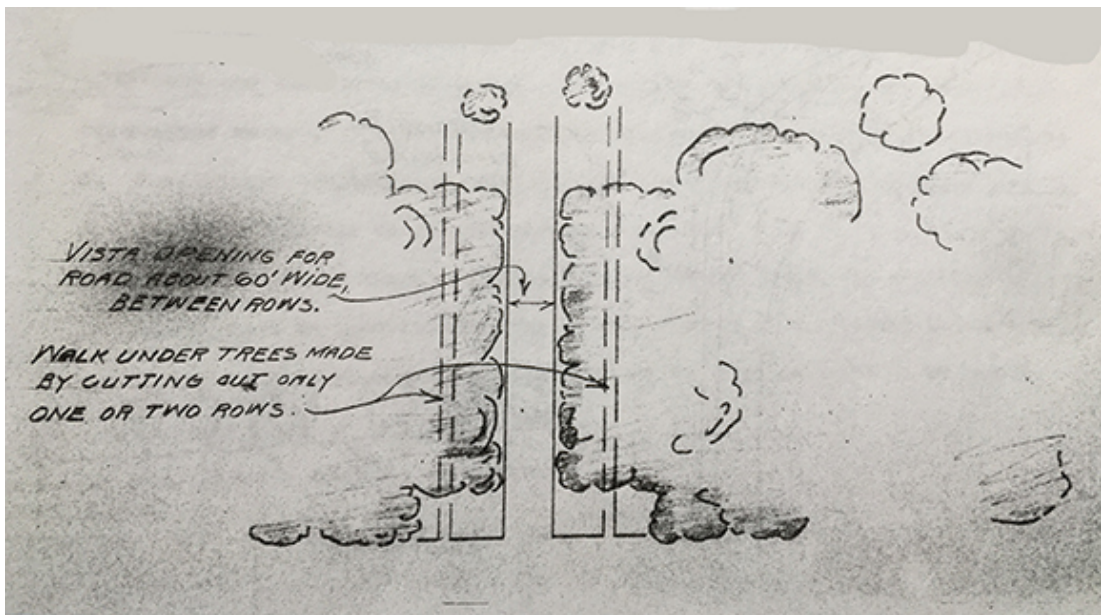
³⁴Frederick Law Olmsted, Jr., "The Basic Principles of City Planning," *The American City* 3, no.2 (August 1910): 67.

³⁵Nolen, *New Towns for Old*, 137.

southward along the coast; Valmonte, inland on high ground overlooking the city district, the mountains and ocean; and Miraleste, a high-class restricted neighborhood overlooking San Pedro and Los Angeles Harbor. Each village was self-sustaining, with a commercial district, residential housing, schools, a library, recreational amenities, and parks, all within walking distance.



Figure 5.8: Palos Verdes Nursery, 1920s. Native and hardy plants were propagated on site to ensure compatibility with local conditions. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site



Figures 5.9 and 5.10: Malaga Cove North Entrance to Palos Verdes, 1925. Credit: Palos Verdes Library District Local History Collection. Drawing by Frederick Law Olmsted, Jr., 1923. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site. Olmsted, Jr.'s intention was to create a "sylvan" entry to the community by cutting through the existing eucalyptus grove.

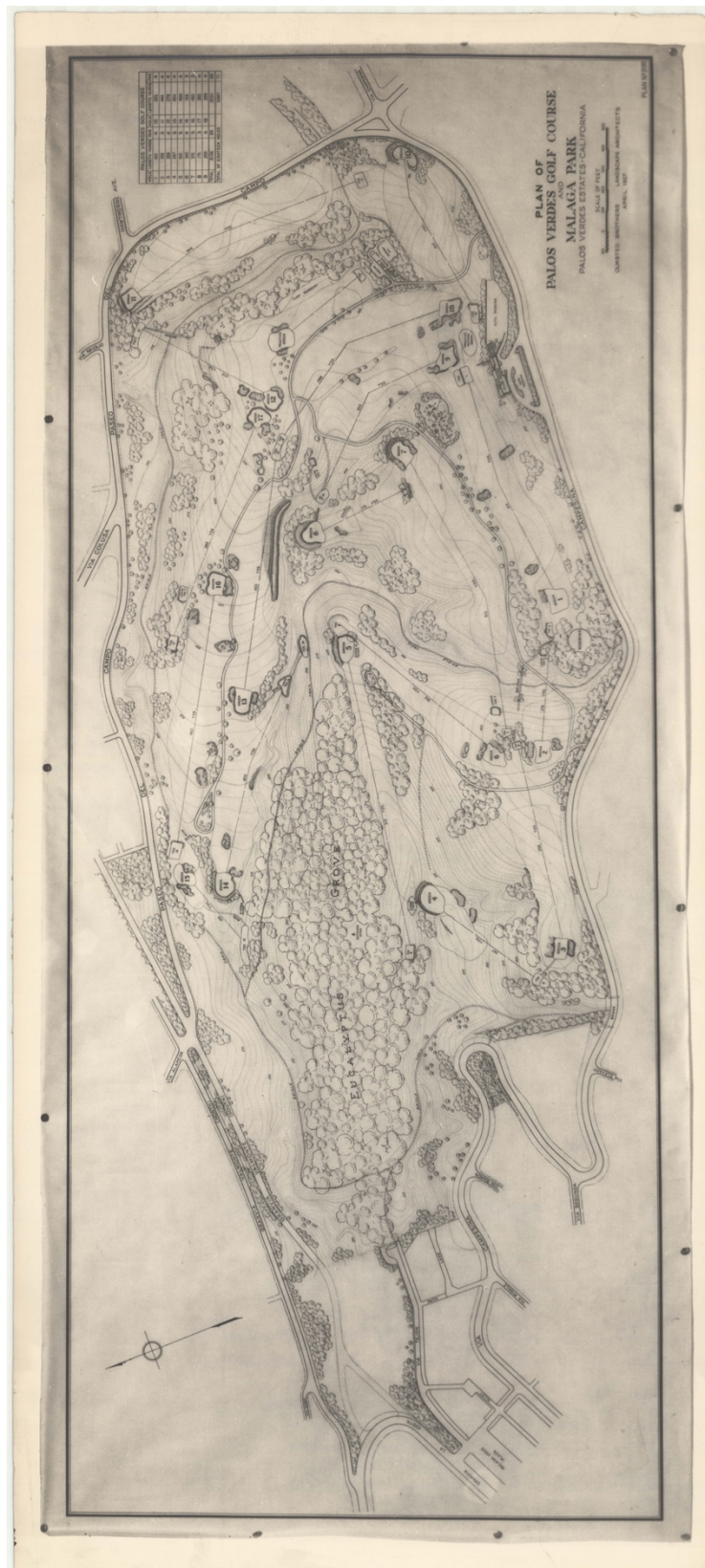


Figure 5.11: Plan of Palos Verdes Golf Course and Malaga Cove Park, 1925. Plan shows maintenance of the existing eucalyptus grove in the development of golf course and park. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

The serpentine roads wove around residential lots, which unlike those of a typical gridded layout, were various shapes and at many different elevations (Figure 5.12). The lots were individually considered to provide views as well as offer options for homeowners to build terraces, gardens, and patios.³⁶ Additional restrictions allowed only 30% of each lot to be covered by buildings. The individual consideration of each lot encouraged new property owners to design their residences in ways consistent with the topography and the best attributes of the lot (Figure 5.13 and Figure 5.14).

Community planning also included a careful allocation of open space which afforded again a variety of functional, aesthetic, and social purposes. Rather than lining the coastal cliffs with prime lots, Olmsted, Jr. and his associates argued for setting aside these areas so that the whole community could enjoy the setting and views. In 1922, the designers succeeded in having the open spaces of the community permanently designated as “public reservations,” proscribing future construction. The justification was in part that access to these areas for development would be too expensive because of the terrain. Adding roads or buildings would also “imperil the attractiveness of an important and valuable landscape,” thus depreciating its value and perhaps that of the community as a whole.³⁷ A system of open, public spaces therefore maintained the existing natural landscape as an amenity—with the additional function of assisting drainage and stormwater recharge. The grading of roads and individual lots was sloped to drain to these open spaces, which were heavily planted and so to some degree disguised this ecological function of water management (Figure 5.15 and Figure 5.16).

³⁶ Gates, “The Palos Verdes Ranch Project.”

³⁷ James Frederick Dawson to Frederick Law Olmsted, Jr., Letter, 20 January 1923, [Palos Verdes], #5950, O.A. Papers.



Figure 5.12: First development of 3200 acres, 1925. Plan highlights roads designed along contours, dedicated greenspaces, commercial centers and unusual lot shapes. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

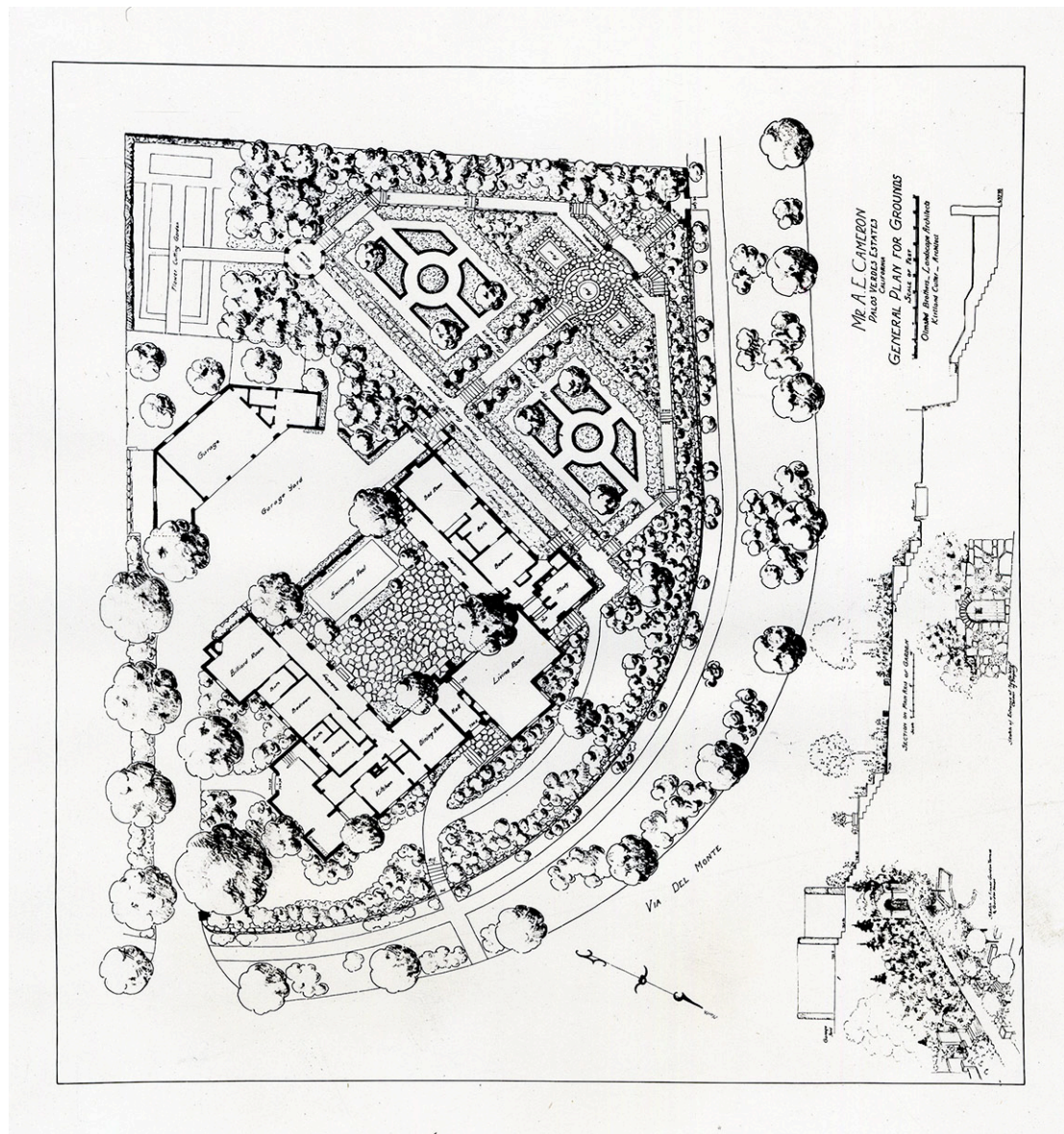


Figure 5.13: General Plan for Grounds at A.E. Cameron Residence, n.d. Section shows the way the building and landscape were designed to take advantage of the topography. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site



Figure 5.14: House by Kirkland Cutter, Arch., Building and Surroundings in Relation to Sweeping View, n.d. Photograph of mature design of the A.E. Cameron residence shows the siting of the building and unobstructed landscape design to take advantage of the ocean and mountain views. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

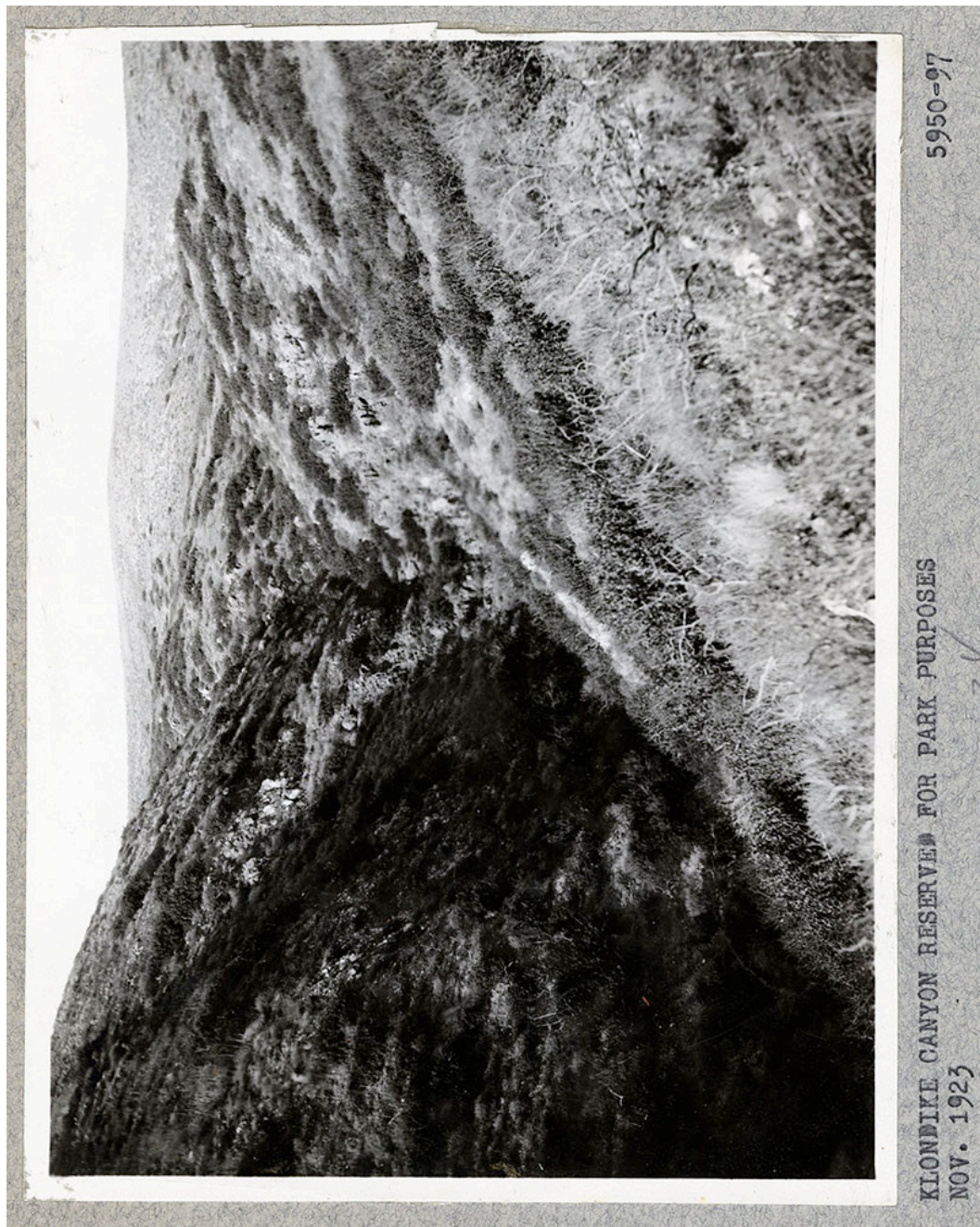


Figure 5.15: Klondike Canyon reserved for Park Purposes, 1923. Preserved open space maintained existing natural landscape with additional function of assisting drainage and stormwater recharge. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

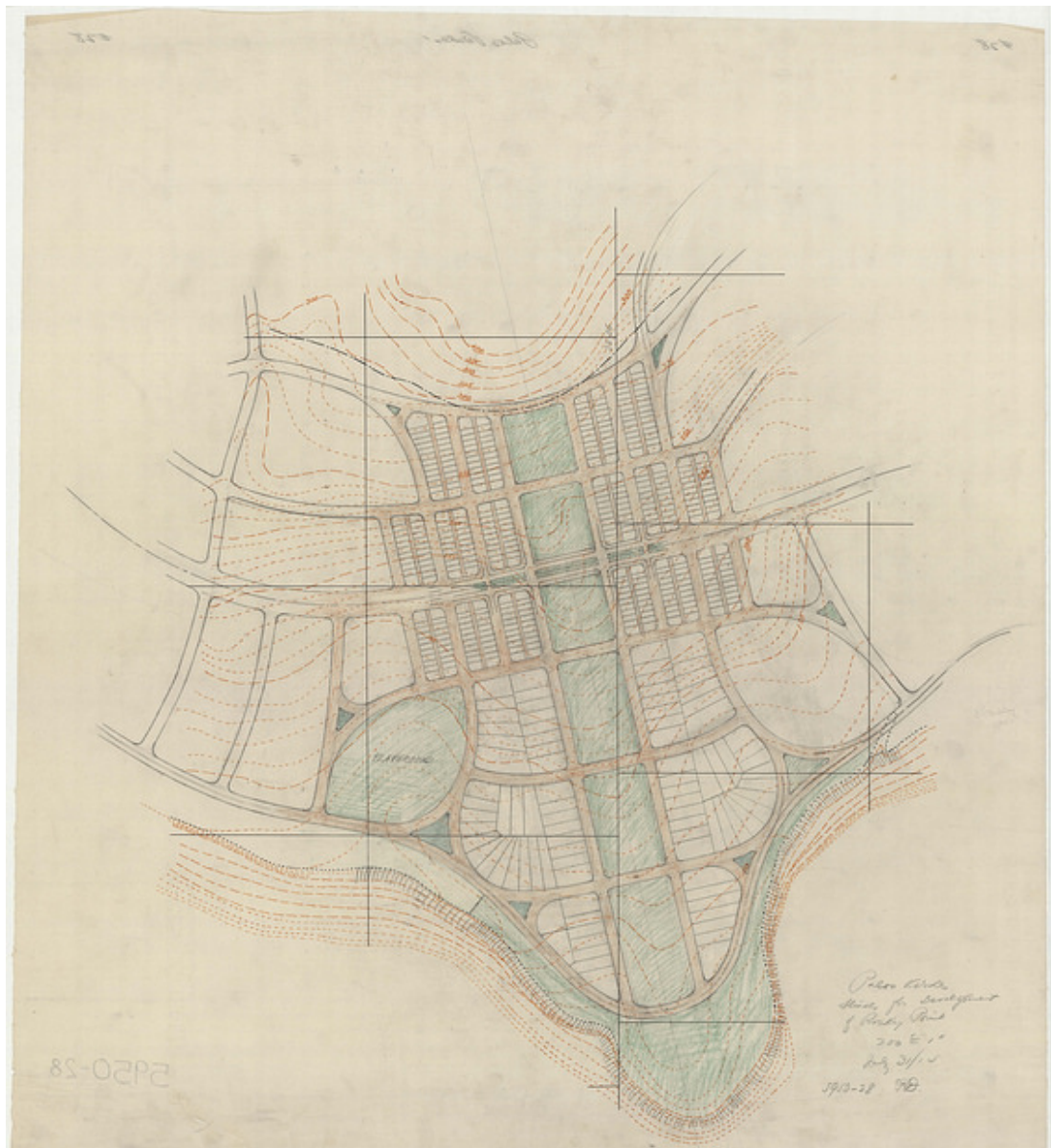


Figure 5.16: Study for Development of Rocky Point, 1914. Graphic shows open space and parks in green to follow coastline in a permanent public reservation. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

WATER: STORMWATER MANAGEMENT, PERMEABILITY, IRRIGATION

In Southern California, then as now, the management of stormwater presents challenges since conditions alternate between drought and flooding; however, Olmsted, Jr., and his associates accommodated this aspect of the regional climate. The management of stormwater run-off at Palos Verdes, in particular, prefigured later strategies of ecological planning and design. Olmsted, Jr. wrote in 1927:

As part of all street locations in the preliminary plan, controlling tentative grades were established, with constant regard for the effect on abutting property and for the handling of storm water, the intention being to divert the latter at frequent intervals into canyons and other natural drainage channels reserved for this purpose, so as to avoid any general necessity for storm drains other than culverts.³⁸

Throughout the site, natural drainage channels were maintained and stormwater flowed into ravines, where it seeped back into the ground without eroding the landscape. Road design featured frequent inlets to discharge surface water below the roadways. Olmsted, Jr. created a supplemental erosion control measure through native planting, instructing the general contractor to place shrubs and trees “at the base of the steep slope or little cliff....In general this planting will be of native sorts that will endure without irrigation after they are once established.”³⁹ This effect would not only minimize erosion but would maintain a natural look that the firm wanted the landscape to retain (Figure 5.17). Writing to the road engineer in 1917, Olmsted, Jr., was very concerned about road design functioning *both* with engineering and aesthetics:

Regarding storm drainage: we are first of all extremely anxious to avoid the stiff appearance of concrete gutters and curbs. We appreciate that the rains are apt to be heavy, if only for short periods, that the soil is such that it washes easily, and that special precaution of some sort must be taken...[but also] with the natural appearance of the road design and of the general surroundings.⁴⁰

³⁸ Olmsted, Jr., “Palos Verdes Estates,” 260 – 261.

³⁹ Frederick Law Olmsted, Jr. to W.H. Kiernan, Letter, 9 October 1914, [Palos Verdes], #5950, O.A. Papers.

⁴⁰ Frederick Law Olmsted, Jr. to Hunter and Hudson, Letter, 25 January 1917, [Palos Verdes], #5950, O.A. Papers.

Because of the region's heavy water flow during winter, and aware of Powell's soils reports, road permeability was a concern as new road construction continued in the 1920s. In 1922, Olmsted, Jr. met with Carl Scofield, who was conducting experiments on soil permeability "especially western soils that lose their permeability under continued irrigation and become worthless," hoping this research might offer value to the road construction at Palos Verdes. Olmsted, Jr. wrote project civil engineer H. T. Cory that applying a similar method to the roads was a way to test the effectiveness of the addition of alum to the native soil to create a lasting permeable soil to maximize surface drainage.⁴¹ If permeability could not be achieved within the roadway, he designed for stormwater runoff into planted swales and open space that could absorb the overflow of winter rains.

Because of the use of regionally appropriate plants and other design strategies, Palos Verdes was largely a non-irrigated landscape, an unusual practice even in the 1920s. Realizing that new California residents might not appreciate the dry Mediterranean palette, John Charles wrote in 1914:

We believe it would be advantageous to do a great deal of landscape planting on lots and residence tracts before they are sold, especially ornamental trees and fruit trees, not only to assist in rapidly bringing large areas into attractive home-like condition, but because so many prospective purchasers know so little about the planting of residence grounds, especially in Southern California where the climatic and soil conditions are unfamiliar to many.⁴²

The firm was able to design many private residential landscapes within the subdivision using plants from the on-site nursery, ensuring horticultural success while at the same time keeping the subdivision's need for water as low as possible (Figure 5.18).

In response to western climates and conditions, the Olmsted Brothers adapted their practice and minimized the need for irrigation. In the village of Malaga Cove, for example, the central green space of Farnham Martin's Park reduced supplemental irrigation by its limited understory vegetation found in pots and along path edges, where the design transitioned from the cultivated, more formal design of the park, into the adjacent non-irrigated native landscape (Figure 5.19 - Figure 5.23). The limited use of lawns focused on

⁴¹ Frederick Law Olmsted, Jr. to H.T. Cory, Letter, 19 June 1922, [Palos Verdes], #5950, O.A. Papers.

⁴² John Charles Olmsted to W.H. Kiernan, Letter, 19 October 1914, [Palos Verdes], #5950, O.A. Papers.

meeting recreational needs, while creating a strong aesthetic effect, a factor also found in adjacent commercial landscape design. Lush with evergreen trees and drought tolerant plants, these areas required minimal water during the non-rainy season, and none during the winter months (Figure 5.24). Low-water planting design, with its minimal irrigation, was a new paradigm for typical American landscapes.



Figure 5.17: Streetscape in Palos Verdes, 1926. Lush planting along road was used to absorb stormwater and beautify the street. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

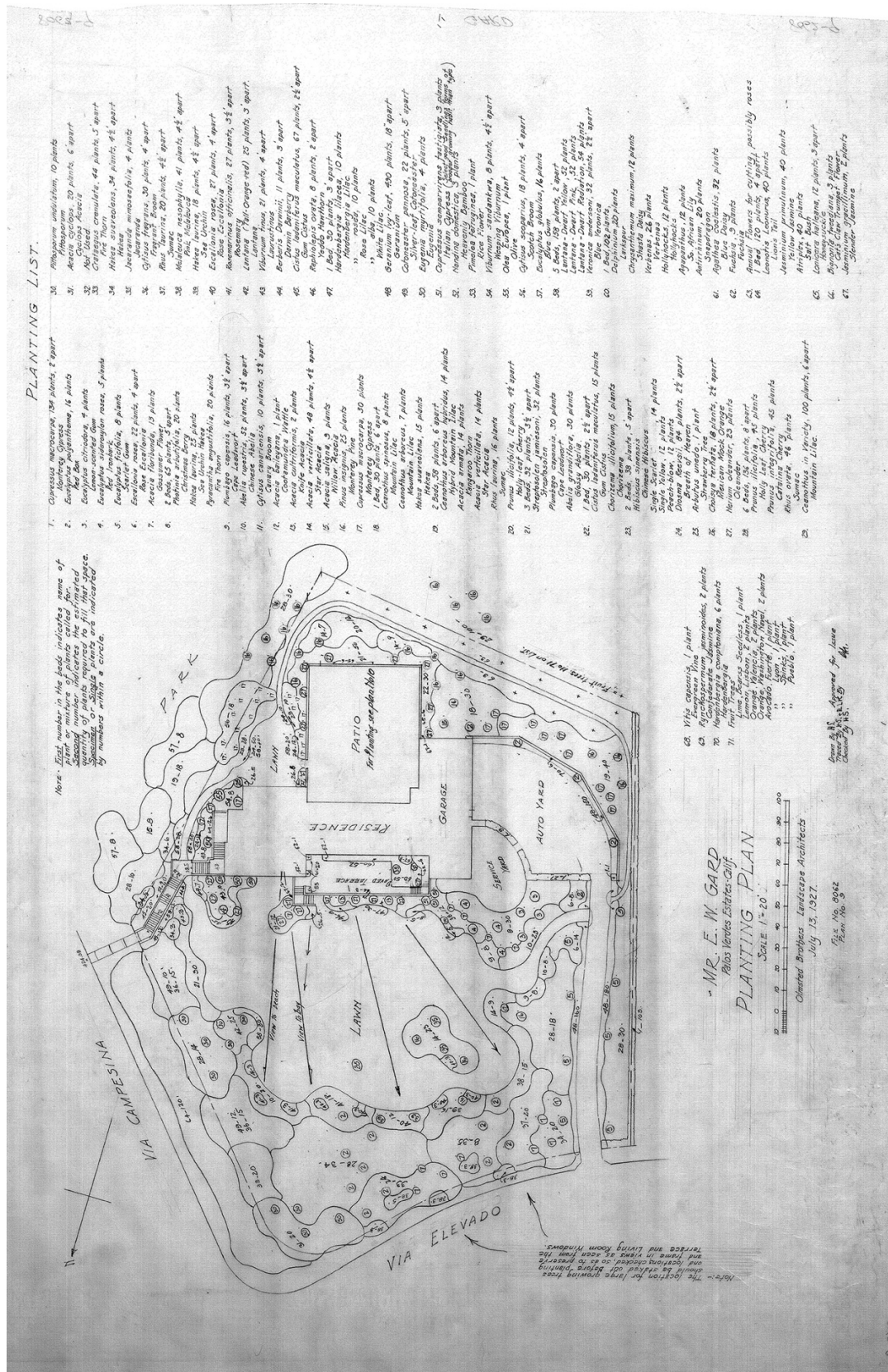


Figure 5.18: Olmsted Brothers' designed E.W. Gard residence, 2780 Via Campesina, Palos Verdes, 1927. Example of firm's residential design with enclosed courtyards, minimization of lawns and lush, drought-tolerant planting. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site



Figures 5.19 and 5.20: Farnham Martin's Park, 1929 and 1931 respectively. Park design relied on Moorish rather than pastoral elements with profuse use of Palos Verdes stone and fountains. Planting design blurred into the borrowed view of the native hillside planting. Credit: Palos Verdes Library District Local History Collection and Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site, respectively

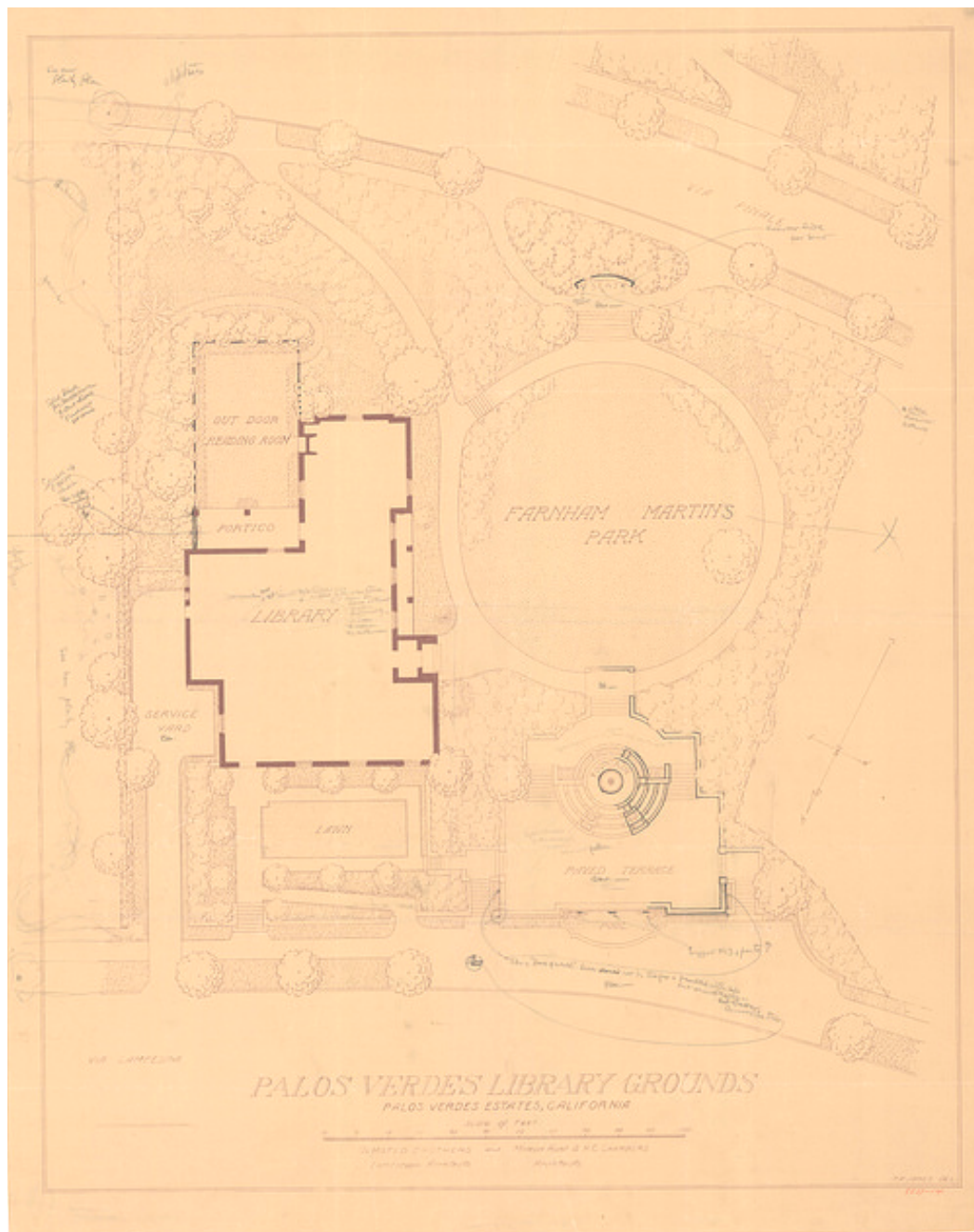


Figure 5.21: Palos Verdes Library Grounds, 1930. Site plan of Farnham Martin's Park on right and the Myron Hunt-designed Palos Verdes library. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

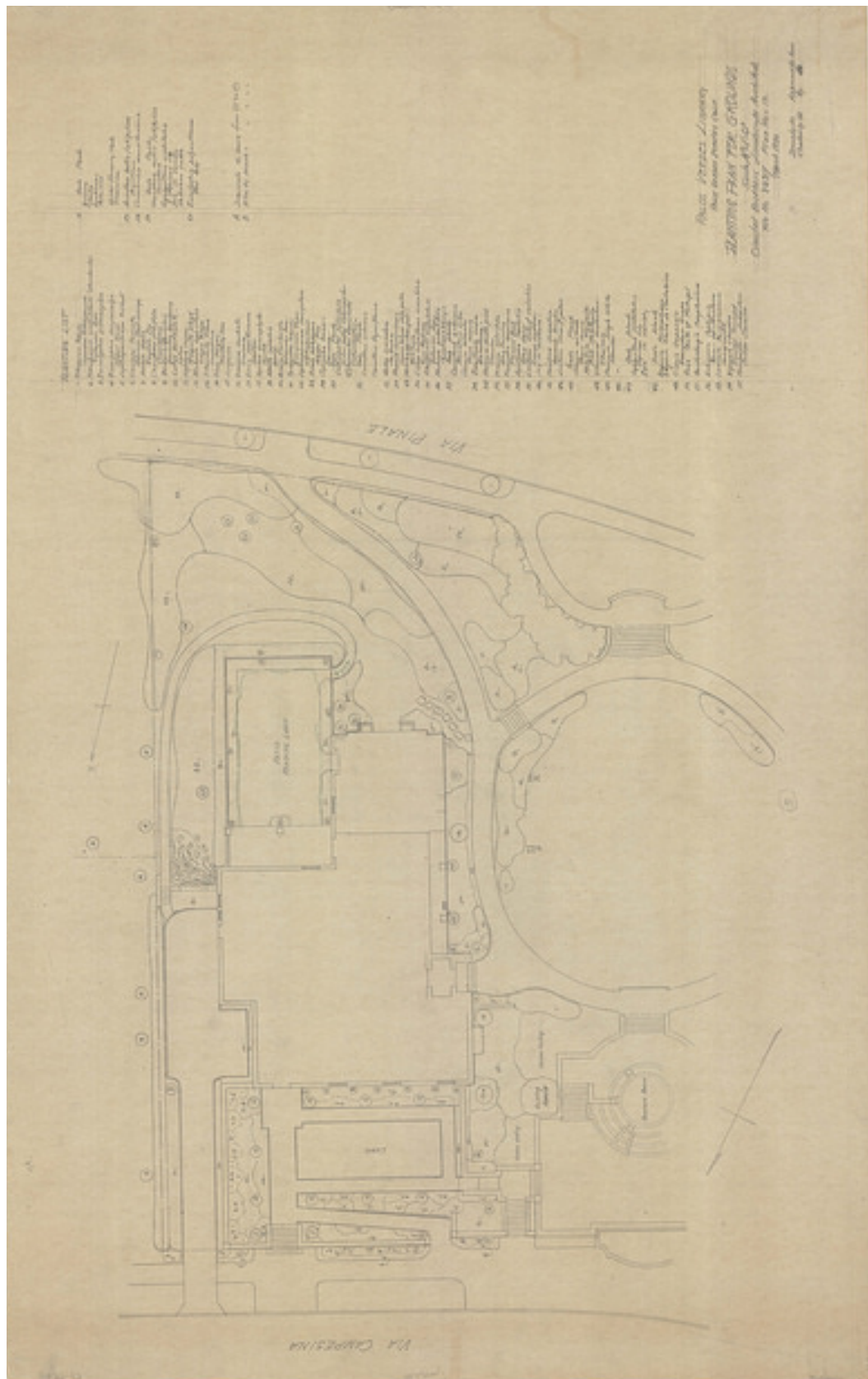


Figure 5.22: Planting Plan for Grounds of Palos Verdes Library, 1930. Planting plan for east edge of Farnham Martin's Park and Palos Verdes Library reflects a drought-tolerant plant list and minimization of lawns. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

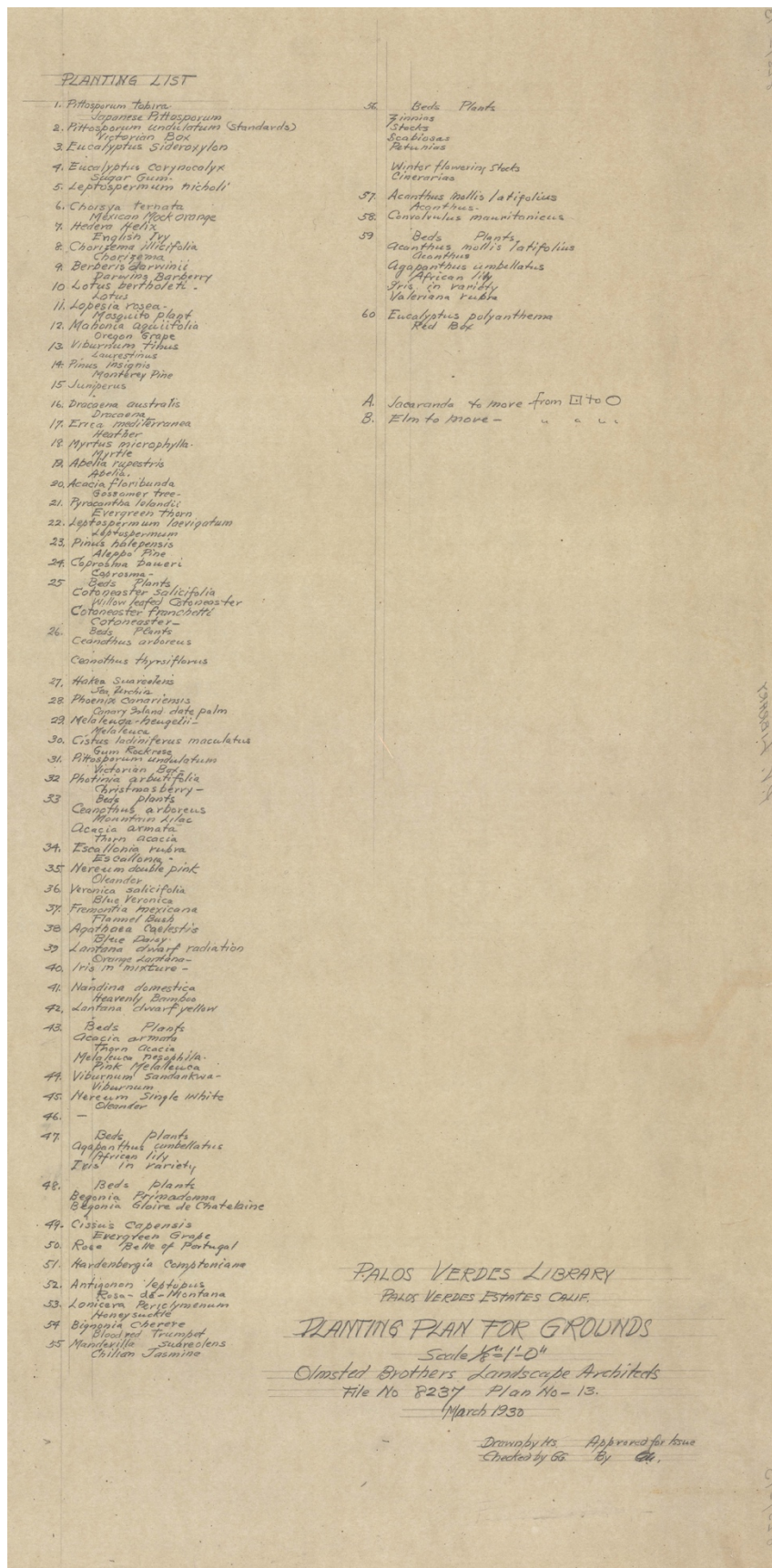


Figure 5.23: Zoom-in of Plant list for Palos Verdes Library and east edge of Farmham Martin's Park. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site



Figure 5.24: Gardner Building, Malaga Cove Plaza, Palos Verdes, 1925. Commercial areas also minimized lawn in an effort to reduce water use. Credit: Palos Verdes Library District Local History Collection

CALIFORNIA ARCHITECTURE

During the most intense period of construction in the 1920s, the core of the developed area of Palos Verdes was reduced to 3,200 acres with Malaga Cove the first village to be constructed on the northwest edge of the Palos Verdes Peninsula, built according to the plans created by the Olmsted Brothers. The developer's initial optimism about Palos Verdes was then tempered by the Great Depression, when financial obligations forced much of the rest of the acreage to be sold, later becoming the city of Rancho Palos Verdes.

Many of the various architects commissioned at Palos Verdes sought to employ a style of building that was as appropriate to the climate and setting as the landscape design. The development of a distinct style described as "California Architecture" was the required style of residential architecture in District I where the white stucco structures with their red tile roofs were visible as viewed from lower elevations.⁴³ The use of local Palos Verdes stone was also a way of creating a sense of place and regional character, with the stone used in retaining walls, terraces, and fountains, in both public and private landscape designs (Figure 5.25 and Figure 5.26).

The 1920s architecture of Palos Verdes has been the subject of considerable critical attention; however, the climatic appropriateness of the architecture has been observed less often.⁴⁴ Often working collaboratively with the architects, John Charles argued that his firm should provide "suggestions with respect to the adaptation of the plan of a building to local topographical conditions...and many other matters which are not always planned to the

⁴³ Districts II and III, on the other hand, allowed for non-Mediterranean architecture such as Norman, English Tudor, French Mansard and Georgian Revival. In a 1928 journal article, city planner Charles Cheney explained his reason for why Type III architecture of the "Northern type" was permitted at Palos Verdes Estates: "Type III of steep-roofed northern, Norman, etc. is limited to a few blocks here and there to take care of the easterners who cannot forsake their steep-pitched, snow roofs even though they're hardly appropriate for a snowless country," Cheney, *Types of Architecture Approved for Palos Verdes Estates* (Palos Verdes Estates: Building Commissioner, n.d.), [Palos Verdes], #5950, O.A. Papers.

⁴⁴ See E.G. Lewis, *The Palos Verdes of Today*, 1926 (n.p.); Olmsted Jr., "Palos Verdes Estates,"; Charles H. Cheney, "Palos Verdes," 1930; Morgan, *Palos Verdes Story*, 1983; Fukuo Akimoto, "Charles H. Cheney of California." *Planning Perspectives* 18 (2003): 253-275; Gates, "The Palos Verdes Ranch Project."

best advantage by architects.”⁴⁵ For example, in critique of a proposed 1914 Palos Verdes country club house design by architects Myron Hunt and Howard Van Doren Shaw, John Charles noted that “to secure more light and cross draft, the garden court might be lowered a little more and windows introduced in the wall between the terrace walk and sunken garden. This should be done on all three sides of the sunken garden, as the basement as planned does not seem to us well enough lighted and ventilated.”⁴⁶

Another example of the desire to see climate-appropriate architecture for Palos Verdes could be seen in Olmsted, Jr.’s personal home built in 1925. Designed by Myron Hunt and based on a “Mexican adobe typology,” its asymmetrical plan also recalled California ranch architecture of the 1830s.⁴⁷ The adobe residence was built to allow cross drafts from the ocean breeze, and so was kept cool in summer. Palos Verdes stone was used both in the house and the residential landscape to better link the architecture to the site. Olmsted, Jr.’s garden design was also insightful, representative of his approach to Southern California. Strong formal design was found in the courtyard area with two long axial gardens divided by decomposed granite paths that mimicked the footprint of the house. The planting plan reflected a lush, yet low-water plan filled with plants such as California lilac, cape plumbago, and Darwin’s barberry. A bosque of fruit trees and large vegetable garden replaced the typical grass lawn in the front yard. Instead Olmsted, Jr. used small-scale turf lawns primarily for active use. After building his house on the bluffs, Olmsted, Jr. decided in 1926 to retire to Palos Verdes Estates (Figure 5.27, Figure 5.28, Figure 5.29).

⁴⁵ John Charles Olmsted to Eliot Norton, Letter, 20 March 1914, [Palos Verdes], #5950, O.A. Papers.

⁴⁶ John Charles Olmsted to Eliot Norton, Letter, 19 March 1914, [Palos Verdes], #5950, O.A. Papers.

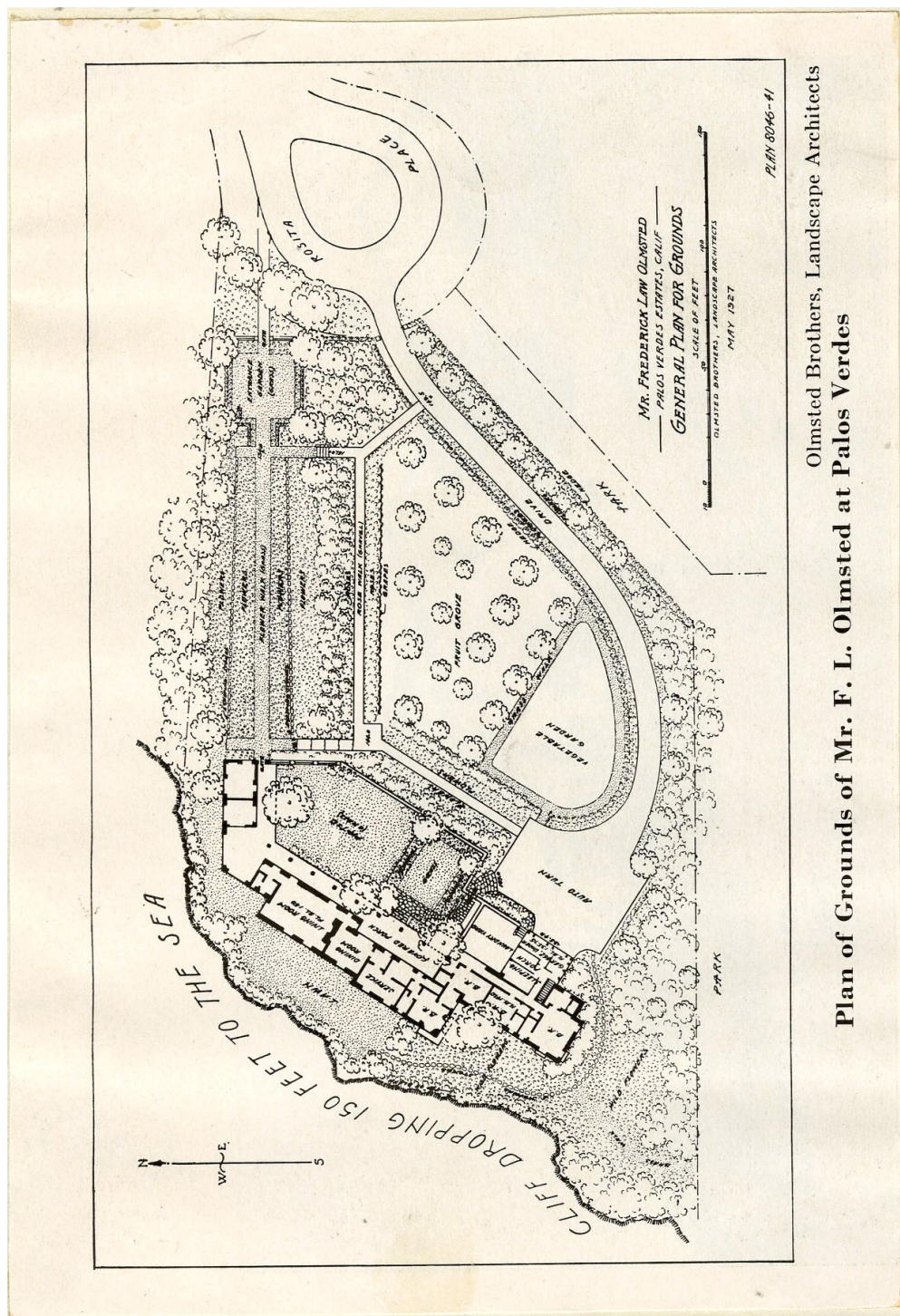
⁴⁷ Myron Hunt and H.C. Chambers, “The Architecture of the Pasadena Public Library,” 1927 Manuscript: 3, cited from Alison Clark, “Myron Hunt in Southern California.” Additionally, one can speculate that this form also drew on the California rancho from the 1830s, which Harold Kirker argued was the first authentic California housing type, Harold Kirker, *Old Forms on a New Land: California Architecture in Perspective* (Niwtot: Roberts Rinehart Publishers, 1991).



Figure 5.25: Malaga Cove School, 1927. Designed by Alison and Alison, it exemplifies California Architecture in eclectic blend of Spanish and Mission styles. Credit: Palos Verdes Library District Local History Collection



Figure 5.26: Palos Verdes Golf Club, 1927. Palos Verdes stone created uniformity in walls and paving, linking its materiality to the site. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site



Olmsted Brothers, Landscape Architects
Plan of Grounds of Mr. F. L. Olmsted at Palos Verdes

Figure 5.27: Plan of Frederick Law Olmsted, Jr.'s personal residence, 1927. Landscape design reduced lawn areas, added a large orchard and long walk of perennial plantings. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site



Figure 5.28: Frederick Law Olmsted, Jr. in his personal garden, 1926. Landscape design tied circulation and materials to the architecture. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

Power of the Art Jury

By 1918, the State Zoning Act had been passed to “protect and preserve the rights and privileges of property owners.” Zoning controlled the way that property was used, but new to Palos Verdes’ planning was the control of the *appearance* of the buildings. Palos Verdes was the first city to have a paid Art Jury comprised of expert designers, a feature that is still an important part of controlling the appearance of Palos Verdes today. The Palos Verdes Homes Association, as the non-profit organization was named, required review of design plans and interpretation and enforcement of covenant restrictions. As in the 1920s, upon submission of plans, the Jury approved or disapproved of all building and landscape design, ensuring that they were harmonious with surrounding neighbors and stylistically matching the ideal of the community. To encourage better design, prizes were awarded each year to exemplary designed homes in Palos Verdes and published in the local newsletter, *Palos Verdes Bulletin*. Writing as early as 1914, John Charles discussed the necessity of architectural control:

We may as well take this occasion to remark that the whole matter of architecture in connection with the development of Los Palos Verdes is of fundamental importance. We regret to say that experience has shown that Americans very generally have failed to exhibit in the choice of architectural styles that intelligence which distinguishes them in many other directions. We refer more especially to the vast importance of harmony and consistency in local character and individuality. No doubt it has been found to have no bearing on the money making side of land development, but we believe there are cases in which often, at small temporary sacrifice of profit, there would be a far greater return on the investment if the architectural character of the buildings in a given subdivision were carefully and absolutely restricted in the deeds to a single style of architecture and to a limited choice of exterior building materials so as to secure arbitrarily the harmony and individuality which distinguishes many of the small European cities and the older parts of larger cities and which has been found to be a tremendous asset in attracting Americans and other travelers.⁴⁸

The power of the Art Jury was to maintain the original design premises as outlined in the Protective Restrictions and Covenants written by the Olmsted Brothers and Charles

⁴⁸ John Charles to Jay Lawyer, Letter, 20 March 1914, [Palos Verdes], #5950, O.A. Papers.

Cheney.⁴⁹ Initial Art Jury members were Myron Hunt, architects Robert Farquhar and David Allison, project manager Jay Lawyer and Charles Cheney, a group who philosophically and aesthetically shared values with the Olmsted firm. This body ensured that Olmsted designs were built and kept per plan through the 1920s in careful oversight of not only building schemes, but all landscape features at Palos Verdes including open space. The power—and alliance—of the Art Jury would provide the foundation and the necessary political power for the Olmsted Brothers to build their projects without changes. If the Art Jury was unclear on acceptable garden designs, they could review Olmsted, Jr.'s book of prints prepared for their office.⁵⁰

GREEN INFRASTRUCTURE DESIGN

Green infrastructure is a late twentieth-century term that describes an interconnected network of green spaces that provide a range of ecosystem services. Benedict and McMahon define green infrastructure as a “strategically planned and managed network of wilderness, parks, greenways, conservation easements, and working lands with conservation value that supports native species, maintains natural ecological processes, sustains air and water resources, and contributes to the health and quality of life for America’s communities and people.”⁵¹ Though the word was coined in 1994, historic examples include the late 19th century Boston Park System by Frederick Law Olmsted, Sr. and Charles Eliot, as well as the Minneapolis Park System by Horace W.S. Cleveland, two park networks that were connected by a series of parkways. Their linked parks and

⁴⁹ Olmsted, Jr. defined the Art Jury: “It is operating under the Palos Verdes Homes Association, a non-profit corporation of the property owners with officers similar to those of a small city and with an Art Jury permanently and suitably established and financed to control the character of the buildings and improvements, to encourage better types of work and to prevent unsightly or undesirable developments.” Preliminary Report on Lands in the Easterly Portion of Palos Verdes Ranch, California,” 14 September 1931, [Palos Verdes], #5950, O.A. Papers. For further discussion of deed restrictions by the Olmsted firm, see Frederick Law Olmsted, Jr., “Deed Restrictions that affect houses in planned neighborhoods,” *Architectural Record* 88, no. 5 (1940): 32-35; and Marc Weiss, *Rise of Community Builders*, 70.

⁵⁰ Charles Cheney to Olmsted Brothers, Letter, 1 October 1923, [Palos Verdes], #5950, O.A. Papers.

⁵¹ Mark A. Benedict, Edward T. McMahon and Conservation Fund, *Green Infrastructure: Linking Landscapes and Communities* (Washington, D.C.: Island Press, 2006), 281.

parkways in Boston and Minneapolis provided a continuous park experience and green space throughout the city.

Such linked corridors were a prominent aspect of the Palos Verdes landscape and yielded the ecological and social benefits described today as green infrastructure (Figure 5.30). The Olmsted firm designed a significant number of residential developments throughout the United States, but it is interesting to note that Frederick Law Olmsted, Jr. believed that Palos Verdes Estates was their best project. “I will not dodge the fact that I have laid out residential communities (such as Forest Hills, New York) where the initial improvements have been much more costly per acre and therefore more complete than is practical at Palos Verdes,” Olmsted, Jr. wrote to Palos Verdes city manager Henry Clarke. “But it is equally a fact that Palos Verdes stands head and shoulders above any other great residential community in these respects: It has a more complete, systematic and liberal provision from the start for parks, playgrounds, school sites and parkways than any other, including its entire wonderful ocean shore of 4 ½ miles in length on the present tract alone.”⁵² It was the significant use of green space that set apart the Palos Verdes design. For Olmsted, Jr., what one would call today green infrastructure design offered aesthetic, ecological, and economic value to the community, qualities that are maintained at Palos Verdes to the present.

By the 1960s, McHarg and others were codifying the principles of ecological design and planning in a renewed theory and practice that drew on ecological science as well as the emerging Geographic Information System, and Steiner continued to detail this process in 2000. But analysis of the Olmsted Brothers’ practice in Southern California indicates that the development of most of the underlying principles were present in their 1920s’ design. Their practice integrated a thorough and systematic analysis of the local ecology of their site which determined design form and function at Palos Verdes. Frederick Law Olmsted, Jr.’s work in Southern California, in particular, bridged 19th century origins and influences and many modern practices of sustainable site design.

⁵² Frederick Law Olmsted, Jr. to Henry Clarke, Letter, 19 February 1924, [Palos Verdes], #5950, O.A. Papers.

AN APPRAISAL OF THE PROJECT AND MODERN APPLICATIONS

The landscapes designed by Olmsted, Jr. and his associates in Southern California reveal a methodology of great interest with potential for adaptation to current conditions and technology. But consideration of the design of Palos Verdes Estates should include an appraisal of its subsequent history. Palos Verdes Estates is the strongest built example of the Olmsted Brothers using a regional approach to drive their design in the semi-arid West. Their design successfully wove Mediterranean designs into a functional American village such that the decisions made in 1914 - 1930 have been maintained and are appreciated today. Though nearly 100 years later, the building restrictions are still in place and the Art Jury, originally organized in 1923, continues to use the original documentation from the 1920s, with limited changes occurring in building setbacks and complete elimination of minority restrictions. The former grassland landscape is lushly planted in the commercial plazas, parks, and residential lots and the Olmsted Brothers' legacy of Malaga Cove is treasured by today's residents for its classic beauty and cultural distinction.

The Olmsted Brothers' planned communities have often maintained a high economic value, even when they were not designed for affluent residents as at Palos Verdes. Consistently, these designed communities were verdant, with utilities placed underground, and residences set back from the street. Architectural design usually followed a particular idiom or style often enforced by covenant restrictions, yet within the restrictions also afforded individual variation. Unusual lot shapes, as at Palos Verdes, contributed to neighborhood character and helped avoid bland uniformity. What is less apparent in an assessment of these landscapes today, however, is the extent of landscape research innovations that characterized the firm's subdivision designs. Their design process can only be understood through archival research and analysis of the many documents and plans conserved for most of the projects. The ecological approach at Palos Verdes was the basis for a design that provided multiple functions and programs for landscape elements, such as parkways and open space, while keeping natural systems largely intact.

The assessment of Palos Verdes, though, must include other, less positive aspects of the community's design. A glaring example is planning as it related to automobiles. Not only did the Olmsted firm spatially convert architectural elements like pedestrian plazas into parking lots in the commercial districts, but they also created a mass system of roadways because of their personal love of cars. Additionally, covenant restrictions against non-Caucasian ownership were a common element of residential development in the early

20th century, and Palos Verdes was no exception. These restrictions continued in this community until they were redacted in the late 1950s to early 1960s. The community still maintains its building and design restrictions, through requirements of the Art Jury, a rotating group of expert designers who approve or disapprove of all building and landscape design, ensuring that it is harmonious with surrounding neighbors and stylistically matching the ideal of the community. This form of control over architectural design has proved invaluable in maintaining the community's character, but also enforces a form of exclusivity by prohibiting less expensive housing.

The ecological planning for Palos Verdes tested a methodology, but it excluded a modern research element in that wildlife habitat received little or no study. Palos Verdes today nevertheless serves as a considerable wildlife refuge, but this is a mostly unplanned result of the amount of vegetated open space planned in the early phases of design. The endangered Palos Verdes Blue butterfly, for example, lives in coastal sage scrub, and its habitat has been largely destroyed in most of Los Angeles. The butterflies' demise has been mitigated in Palos Verdes by the host plants locoweed and common deerweed on which it depends and thrives in the open spaces. There is no evidence, however, in the Olmsted plans that this use was intended or anticipated.

Palos Verdes was also never developed to its full extent. While Malaga Cove was developed according to the Olmsted plan, the village of Lunada Bay and the remaining lands that became Rancho Palos Verdes, are the results of very different approaches to landscape design and in fact are an antithesis to the original Palos Verdes model. Lunada Bay was built during the post-World War II era which saw a return to turf front lawns and an abandonment of using hardy and native plants in the landscape. The State Water Resources Control Board reported in 2015 that collectively the new and historic neighborhoods of Palos Verdes Estates residents, overall, used 178.1 gallons of water per resident, per day, compared to a statewide average of 97.32 gallons.⁵³ The modern statistic indicates a result of using more water than was initially intended.

Landscape architect Elizabeth Meyer asserts in "The Post-Earth Day Conundrum: Translating Environmental Values into Landscape Design," "to some it might seem odd that landscape architects looked toward art and design theory and practice when seeking

⁵³ State Water Resources Control Board, accessed January 10, 2015, http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/rgpcd_2015june.pdf.

direction about folding ecological principles and environmental values into their creative processes. But this simultaneous look to art as well as science and to theories of site specificity and phenomenology as well as ecology was critical to the successful integration of environmentalism in landscape architectural design.”⁵⁴ The ecological approach to the design of Palos Verdes arguably stemmed from the fact that an environmentally progressive landscape architecture firm was in charge of most aspects of design and engineering. Their discipline focused on landscape first, designing new communities where ecology *with art* became the initial aim and approach. Frederick Law Olmsted, Jr., and his associates foresaw the need for working in accord with natural systems in order to best inform the design for human needs.

CHAPTER SUMMARY

Palos Verdes Estates was the largest new town and at an initial 16,000 acres, became the most extensive suburban commission the Olmsted Brothers ever undertook. It was a model community that encapsulated the values of the Olmsted firm as it worked with natural conditions, maintained hydraulic patterns, preplanned open space and connected greenbelts, with architecture expressive of the Mediterranean locale. The 3,200 acres of built work per the Olmsted plans provides a clear example of the proposed character and style of their later unbuilt projects during this decade. A normative part of their practice, the firm’s site research included a thorough understanding of both biophysical and culture elements, such as regional climate and microclimates, terrain, soils, vegetation, water, geology, and existing land use and users. Ultimately, the findings between 1914 into the early 1920s provided a design vocabulary for an appropriate response in semi-arid regions. Long-time residency by Frederick Law Olmsted, Jr. and Fred Dawson enhanced the principals’ understanding of Southern California’s regional ecology, culture, and politics—an awareness and appreciation that would have great importance for other, major projects the firm developed in the 1920s.

⁵⁴ Elizabeth Meyer, “The Post-Earth Day Conundrum: Translating Environmental Values into Landscape Design,” In *Environmentalism in Landscape Architecture*, ed. Michel Conan (Dumbarton Oaks Research Library and Collection, 2000), 191.

CHAPTER 6

INFRASTRUCTURE DESIGN: LOS ANGELES PARKWAYS DESIGN IN THE PUBLIC REALM, 1924 - 1930

While the exclusive Palos Verdes was built for high-end clientele, Palos Verdes Coast Road was designed as public space for Los Angeles residents to see the scenic panorama of a largely unobstructed view of the Pacific Ocean. The parkway was part of a larger connected system of roadways that would link the county of Los Angeles from the mountains to the sea and further inland along the Los Angeles, San Gabriel, and Rio Hondo Rivers. These parkways were components of several Olmsted Brothers' projects called the Hollywood-Palos Verdes Parkway (1925), Angeles-Mesa Parkway (1926) and those proposed in the 1930 report *Parks, Playgrounds and Beaches for the Los Angeles Region* (Figure 6.1).

As part of a city's basic physical system, roadways provide a network of connected transportation corridors, which continue to be a priority in urban infrastructure planning. In the early 20th century, streets were typically limited to a single function of transportation; however, the Olmsted Brothers' parkway plans from the 1920s were greenway projects, notable in that they had multifunctional capacities to not only create aesthetic circulation, but were also effective flood management landscapes when necessary. This chapter examines how the Olmsted firm's parkway designs integrated infrastructure with regional

ecologies, moving their design work into the public realm, with analysis of ecological planning and design expanded to another landscape type.



Figure 6.1: Pleasureway parks (noted in green) within the Los Angeles park and parkway Master Plan (noted in red). Location of pleasureway parks (including Hollywood-Palos Verdes Parkway) were found in earlier drafts of the report Parks, Playgrounds and Beaches for Los Angeles Region. Credit for Master Plan: Parks, Parkways and Playgrounds for the Los Angeles Region, 1930.

HISTORY OF THE LOS ANGELES PARKWAYS

To provide context prior to examination of the Olmsted Brothers' parkway designs, a brief explanation of Los Angeles' parkway planning and funding up to 1925 is necessary. Important, too, are key political figures involved in these developments, including attorney Henry O'Melveny, and Regional Planning Commissioners Gordon Whitnall and Hugh Pomeroy whose goals were in alignment with the Olmsted Brothers in master planning Los Angeles into the 1930s.

The rapid development of greater Los Angeles was controlled predominantly by developers and needed a master transportation plan. Traffic problems were so severe by the early 1920s that vehicular and railroad accidents were commonplace, and traffic congestion was routine.¹ Los Angeles city engineer Henry Osborne persuaded the Los Angeles Traffic Commission to hire a team of nationally known planning consultants, Frederick Law Olmsted, Jr., Charles Cheney, and Harland Bartholomew, who collaborated on a 1924 report called the *Major Traffic Street Plan*.² In a personal and confidential letter from Cheney to Bartholomew, Cheney wrote that the Commission wanted "three city planners—of national reputation, and preferably different professions or different points of view."³ Traffic Commission Chairman Paul Hoffman confirmed the contract and added five additional committee members including presidents of the Traffic Commission, City

¹ As early as 1911, Los Angeles hired Bion Arnold, a transportation expert and engineer, to develop a comprehensive transportation plan chiefly built around the railroad system, automobiles, and the new "automobile truck" which Arnold foresaw as filling the future role for freight. Bion J. Arnold, "Preliminary Report upon the Transportation Problem of Los Angeles," *The California Outlook* 11, no. 9 (November 1911): 2-20. For more discussion of traffic design by Frederick Law Olmsted, Jr., see *Development of Planning of Towns in Interests of Traffic* (paper presented at the conference Report of the Proceedings of the 5th Congress, Milan, Italy, 1926).

² Frederick Law Olmsted, Jr., Harland Bartholomew, and Charles Cheney, *A Major Traffic Street Plan for Los Angeles*, Prepared for the Committee on Los Angeles Plan of Major Highways of the Traffic Commission of the City and County of Los Angeles, 1924. Harland Bartholomew of St. Louis, Missouri was head of a firm that had produced over 500 city plans. See Matt Roth, "Concrete Utopia," 140, who cites Eldridge Lovelace, *Harland Bartholomew: His Contributions to American Planning* (Urbana: University of Illinois Printing Services, 1993), 6-16; and Mark Foster, *From Streetcar to Superhighway: American Planners and Urban Transportation* (Philadelphia: Temple University Press, 1981), 34-36, 39, 71, 94, 133, 147-148.

³ Charles Cheney to Harland Bartholomew, Letter, 21 February 1923, [Los Angeles Traffic Plan], #5373, O.A. Papers.

Planning Commission, Automobile Club, Chamber of Commerce, and Community Development Association. The *Major Traffic Street Plan* recommended widening existing streets and separating intersections with grade changes to avoid railroad and vehicular collisions with the plan intended to expand into the outlying regions of Los Angeles in future development. Street widths at 110 – 150 feet wide not only mitigated traffic congestion, but had the additional benefit of a fire break within the business district. Jogs in the street layout avoided impacting important architecture such as the cathedral and civic center.⁴

Work on the *Major Traffic Street Plan* also introduced the Olmsted firm to prominent city leader and attorney Henry O'Melveny. In 1885, 26-year old O'Melveny established his law practice in Los Angeles, and during the early 20th century maintained high profile clients such as businessman William G. Kerckhoff, owner of San Gabriel Power and Midway Gas Companies, influential companies that would bring hydroelectric and natural gas power to Los Angeles. A leading advocate for parks and recreation in Southern California, O'Melveny had been a member of the Los Angeles Park Commission since 1910 and was a pioneer in the legal, financial, and cultural development of California. His love of the outdoors paralleled Olmsted, Jr.'s and they would remain friends and politically-connected not only in the Los Angeles arena, but later O'Melveny would serve on the California State Park Commission from 1927-1932.⁵

By the 1920s, the Los Angeles County Regional Planning Commission was formed with the intention of better controlling new development in unincorporated lands. The Commission worked with local municipalities to coordinate projects on land use, transportation, and flood control.⁶ The expectation was that the Regional Planning Commission would bring master planning to the county so that new growth would be rational and regulated. Commissioner Gordon Whitnall established the Los Angeles City Planning Department in 1920 and was its director from 1920 - 1930. He organized the 1924 Regional Planning Conference in Los Angeles County, which addressed key planning issues

⁴ See Mark Foster, "The Model-T, the Hard Sell, and Los Angeles's Urban Growth: The Decentralization of Los Angeles during the 1920s," *Pacific Historical Review* 44 (1975): 459–484.

⁵ For biographical information on Henry O'Melveny see William Overend, "2-Room Office to Lofty Perch: The 100-Year Odyssey of L.A.'s Oldest Law Firm," *Los Angeles Times*, 28 September 1987.

⁶ See Margaret Crawford, *Building the Working Man's Paradise: The Design of American Company Towns* (London; New York: Verso, 1995).

at the time including transportation, flood control, parks and boulevards, and environmental regulation and finance in the Los Angeles region.

Secretary of the Regional Planning Commission Hugh Pomeroy played a powerful role regulating the land use in all unincorporated areas of the county in coordination with city planning commissions in Pasadena, Long Beach, and among other incorporated cities.⁷ He became an important political ally for the Olmsted firm, especially for planning design in Los Angeles. In April 1924, Olmsted, Jr. wrote his partners to introduce them to Pomeroy who was making a trip to the East Coast to study city planning problems and methods of amelioration. Olmsted, Jr. was quick to recommend that someone from his Brookline office host Pomeroy and show him Olmstedian parkway designs at Fenway and Riverway in Boston, projects that revealed “park-like qualities which distinguish them from most of the so-called parkways which constitute major passenger traffic routes”⁸ These projects would show Pomeroy exemplar built parkway designs that Olmsted, Jr. intended for Los Angeles, and later more fully developed as the Hollywood-Palos Verdes Parkway and the Angeles-Mesa Parkway.

The Mattoon Act, otherwise known as the Acquisition and Improvement Act, was adopted by the California Legislature in May 1925. Named after its author, Los Angeles County Counselor Everett Mattoon, the bill promised to streamline and provide funding for much needed public works with the bond issue projected to finance parks and parkways.⁹

⁷ See Hugh Pomeroy’s expertise in planning through publications of “Regional Planning in Practice,” *National Conference on City Planning Proceedings* (1924): 11-28; Hugh Pomeroy, “Two Years of Regional Planning in Los Angeles County,” *City Planning* 1 (April 1925): 47-49; Hugh Pomeroy, “Los Angeles Civic Center Street Plan,” *Community Builder* 1: 18 (January 1928). Pomeroy’s papers are located at Cornell, Division of Rare and Manuscript Collections. Director of L.A. County Regional Planning Commission. Director of Westchester County Department of Planning.

⁸ Frederick Law Olmsted, Jr. to Partners at Olmsted Brothers, Letter, 21 April 1924, [Los Angeles Traffic Plan], #5373, O.A. Papers.

⁹ California Assembly Bill No. 688 read, “An act to provide for the acquisition of, including the layout out, opening, extending, widening, straightening, and acquiring in any manner, in whole or in part, and for the improvement of and work upon public highways, roads, streets, avenues, boulevards, lanes, alleys, courts, places, parks, pleasure grounds, commons, and all public ways and other property and rights of way of the public including any property over which possession and right of use have been obtained under the provisions of section fourteen of article one of the constitution of the State of California...” Controversially, however, the bill made condemnation of desired property for public utilities an easier process and gave enormous power to community authorities and developers to create “improvement districts” that could cross city and county lines.

Los Angeles promoter Henry O'Melveny was quick to act on these bond monies, and contacted Frederick Law Olmsted, Jr. in December 1925 with his thoughts on a new north-south parkway connector. In a move to help alleviate traffic congestion in the downtown, the Auto Club of Southern California proposed a series of job construction projects that led from the heaviest traffic areas to outlying districts. The engineer for the Automobile Club had presented an alternative route to Wilshire Boulevard, from Santa Monica to downtown Los Angeles. Because the routing was through impoverished neighborhoods and thus poor advertising for the business district, O'Melveny argued this plan was a "great mistake." Instead O'Melveny wanted a scenic boulevard connecting the business district to one of "good taste," and worth the acquisition of 200-foot right-of-ways and as much as \$10,000,000 in property purchases. O'Melveny continued:

[The Automobile Club] plan is going to be put in opposition to 'Palos Verdes Boulevard,'—for that is the name I have given it myself. The only argument I can see in favor of [the Automobile Club plan] is that traffic necessities may demand a kind of an East-and-West cross-town boulevard, and that Pasadena with the Arroyo Seco at one end and the Wilshire district running to the East at the other, justifies a connecting link between mean surroundings.¹⁰

While O'Melveny stated he did not wish to draw Olmsted, Jr. and Cheney into local politics, he asked in confidence for arguments to support his plan with the lure of parkway planning in Los Angeles.¹¹ Olmsted, Jr. met with Pomeroy at the Los Angeles City Club on December 26, 1925 to discuss a scope of approximately three miles of parkways, their general plan, grading, and planting plans. By December 30th, Olmsted, Jr. confidently replied to O'Melveny with a proposal that would blend the already developed *Major Traffic Street Plan* with the possibility of two new parkway systems in the Southwest Improvement District: one from the Arroyo Seco to Wilshire Boulevard, and another independent new parkway from Wilshire southwestward to connect with the Palos Verdes Coast Road under construction.¹² Eager to meet with developers, politicians, and others with power,

¹⁰ H.M. O'Melveny to Frederick Law Olmsted, Jr., Letter, 24 December 1925, [Hollywood, Palos Verdes Blvd.], #8101, O.A. Papers.

¹¹ Ibid.

¹² Frederick Law Olmsted, Jr. to H.M. O'Melveny, Letter, 30 December 1925, [Hollywood, Palos Verdes Blvd.], #8101, O.A. Papers. The names Hollywood-Palos Verdes Parkway and Angeles-Mesa Parkway were in use by January 1926 correspondence.

Olmsted, Jr. had learned to be politically astute when a design needed approval, but also as a way to obtain project work for his firm.

DEFINITION OF AN OLMSTED PARKWAY

Though the political alliance with O'Melveny clearly helped the Olmsted Brothers receive the parkways contract, the firm was renowned for parkway designs. As early as 1858, New York's Central Park's pleasure carriage drives were an American precedent. The Boston park system included a series of linear parks—or parkways—with these landscape types coined by Frederick Law Olmsted, Sr. as a “way to the park.” The first park system design by the Olmsted Brothers in Seattle, 1903 - 1908, continued to utilize parkways as a link between city parks. For Los Angeles, the firm would incorporate the region's rivers into the plan, but in an inventive new way. The Olmsted Brothers believed in parkway designs that were multifunctional, with schemes that could simultaneously solve aesthetic, cultural, and functional problems at once. These greenways had the opportunity to blend recreation, conservation, floodwater management, water quality protection, and even fire protection within a single project. For Los Angeles, the parkway designs would not only be park spaces, but blend all of the above, while encouraging tourism by routing the driver by important natural and cultural features in Los Angeles County.

A major precedent for this type of design was the 1922 opening of the Bronx River Parkway in Westchester County, New York. The Bronx River Parkway was touted as “more than a motorway” as its purpose was to transform the polluted river valley into an attractive liner park both for recreation and its beautiful scenery. The Bronx River design was part of a water reclamation project with the Bronx River Commission tasked with cleaning the unregulated districts in the floodplain between Bronx Park and Kensico Dam in Westchester County. The river had become a sewer and was causing health concerns for water-borne diseases such as cholera, typhoid, and malaria, especially during spring floods.¹³

The Bronx River Parkway was recognized as a “reservation” or land that had been “set aside.” Highlighted in the Commission's literature, the parkway elements included

¹³ See Dan Marriott, “Roads Designed for Pleasure: British Influences on the American Motor Parkway,” (Ph.D. diss., University of Edinburgh, 2015), 306-307.

“rejuvenated woodlands, open meadows, water features, recreational pathways, and an attractive scenic drive that highlighted the Bronx River as the leading landscape feature.” Advertisers noted that the designers had emphasized a “naturalistic appearance with carefully planned scenic vistas, clearing and artistically composed tree plantings. The parkway drive became a pioneering example of modern motorway development.”¹⁴ The river would be reclaimed, and a motorway developed through transformation of a region of low-cost housing, mixed agricultural and industrial uses, dumps and swamps, into an attractive landscape devoted to leisure as well as passive and active recreation. (Figure 6.2). The programmatic solutions in Westchester County showcased a parkway with multiple uses.

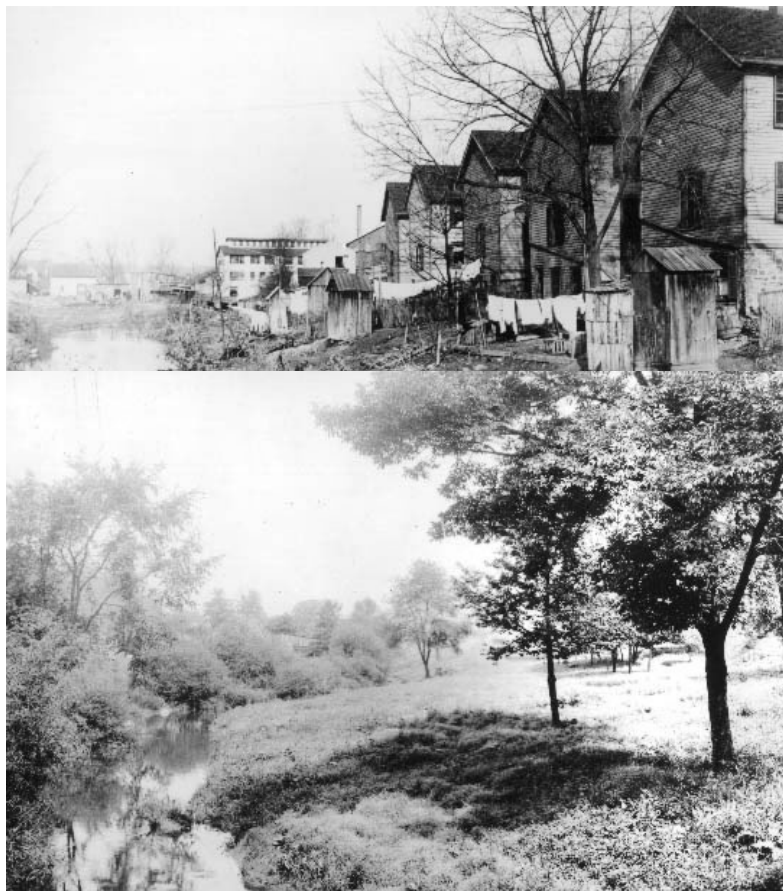


Figure 6.2: Before and After photos of the landscape in White Plains, NY. Before is polluted Bronx River with houses lining the bank, 1912. After shows restored river, 1915. Credit: Westchester County Archives, Historic American Engineering Record, Bronx River Parkway Reservation – HAER No. NY-327

¹⁴ Bronx River Parkway Reservation, The Bronx to Kensico Dam, White Plains, Westchester County, NY, after 1968, HAER NY-327 (sheet 9 of 22), Library of Congress Prints and Photographs Division Washington, D.C., accessed June 21, 2017, [https://commons.wikimedia.org/wiki/File:Bronx_River_Parkway_Reservation,_The_Bronx_to_Kensico_Dam,_White_Plains,_Westchester_County,_NY_HAER_NY-327_\(sheet_9_of_22\).png](https://commons.wikimedia.org/wiki/File:Bronx_River_Parkway_Reservation,_The_Bronx_to_Kensico_Dam,_White_Plains,_Westchester_County,_NY_HAER_NY-327_(sheet_9_of_22).png)

DESIGN OBJECTIVES OF THE LOS ANGELES PARKWAYS

In Los Angeles, the 1926 Olmsted Brothers' routing of parkways would use both existing streets and proposed new ones. The Hollywood-Palos Verdes Parkway, considered an "improvement project" was built on the existing Sepulveda Highway, extending from Paseo del Mar in Palos Verdes, through Redondo Beach and Torrance, to Cypress Avenue and 114th Street. It was the north-south connector road with an east-west parkway that crossed at Avalon Park in Gardena (Figure 6.3 and Figure 6.4). Where the Hollywood-Palos Verdes Parkway terminated, it was extended as the Angeles-Mesa Parkway. The second parkway north of 114th Street carried the roadway up to Adams Street and Crenshaw Avenue, from Los Feliz Boulevard and into Hollywood. Olmsted, Jr. drew this second parkway design on top of drawings for the *Major Traffic Street Plan*, creating a new parkway parallel to his earlier proposed parkways (Figure 6.5).

Engineers had not followed the 1924 plan such that the widening of Crenshaw Avenue had ruined the street design, Olmsted, Jr. opined. "Since that time the roadway of Crenshaw Avenue has been widened to 84 feet, cutting down the trees which gave the street much of the beauty and distinction which it had. The planting space between curb and sidewalk is reduced to meagre insignificance."¹⁵ The proposed parkway would also adjust for the newly built Hollywood business district. Writing to David Farica, Vice President of the Los Angeles Traffic Commission, Olmsted, Jr. offered, "In this study [of the Angeles-Mesa Parkway], therefore, we have disregarded that portion of the tentative suggestion for a parkway route which was offered in the Report of 1924 on the Major Traffic Street Plan..." and re-located the parkway in wholly undeveloped open space or through scattered vacant lots in improved areas. Both the Hollywood-Palos Verdes and Angeles-Mesa parkway designs would adopt an existing street as the "nucleus...and acquire a strip of land on each side of it, by curtailment of the depths of the abutting lots," using the availability of these adjacent lots for improvement of wide parkway frontage.¹⁶

A key feature in the design of the parkways was their substantial width, averaging 200-400 feet wide. A single roadway was 200 feet wide; other times it was an expansive

¹⁵ Frederick Law Olmsted, Jr. to David Farica, Letter, 18 September 1926, [Angeles-Mesa Parkway], #8102, O.A. Papers.

¹⁶ Ibid.

400 feet consisting of three lanes with a central roadway and two border roads, with lush median plantings between the lanes to create a park-like setting along the parkway edge (Figure 6.6).

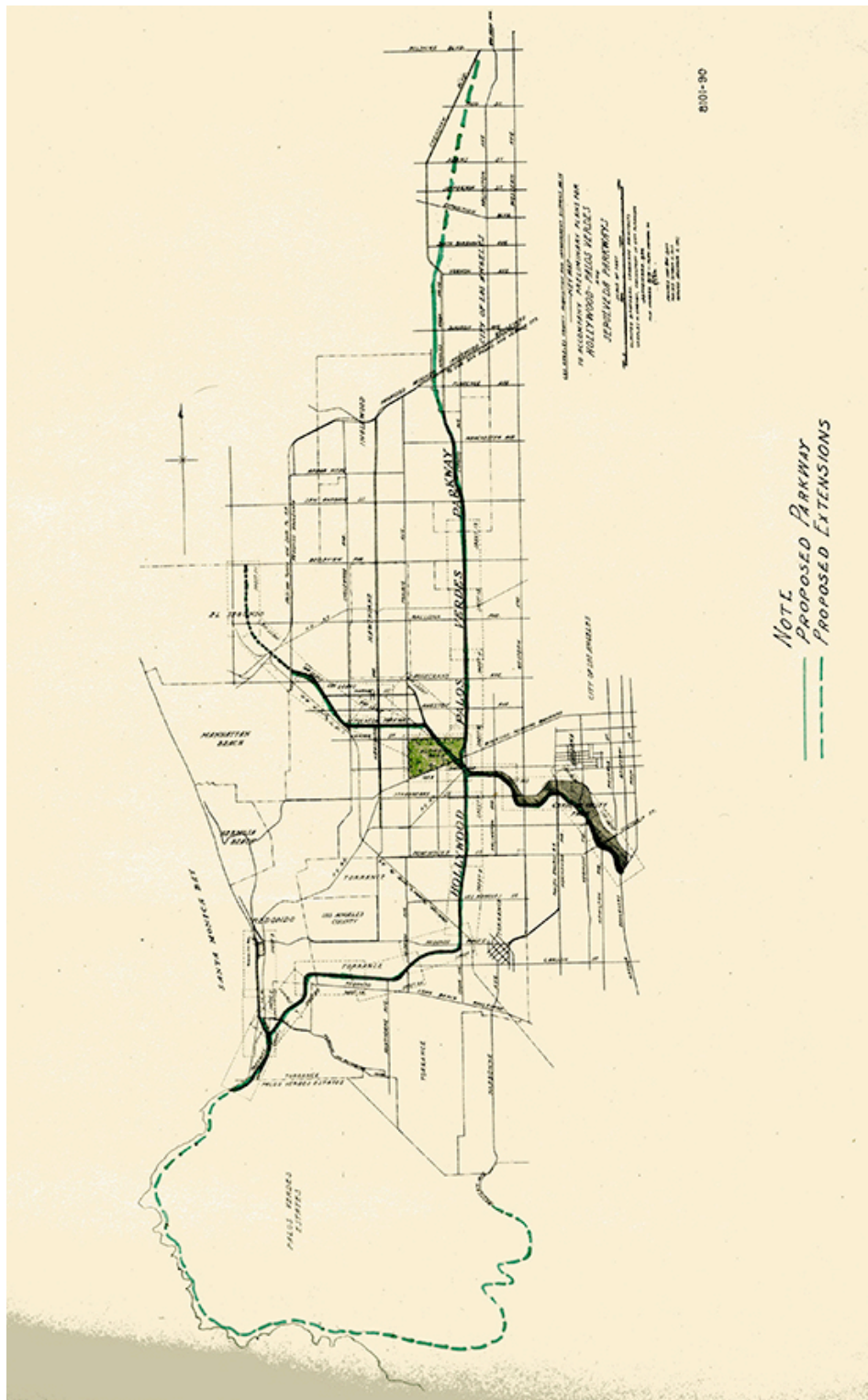


Figure 6.3: Key map to Accompany Preliminary Plans for Hollywood-Palos Verdes and Sepulveda Parkways, 1927. Map shows routing of parkways from Palos Verdes to Wilshire Blvd. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

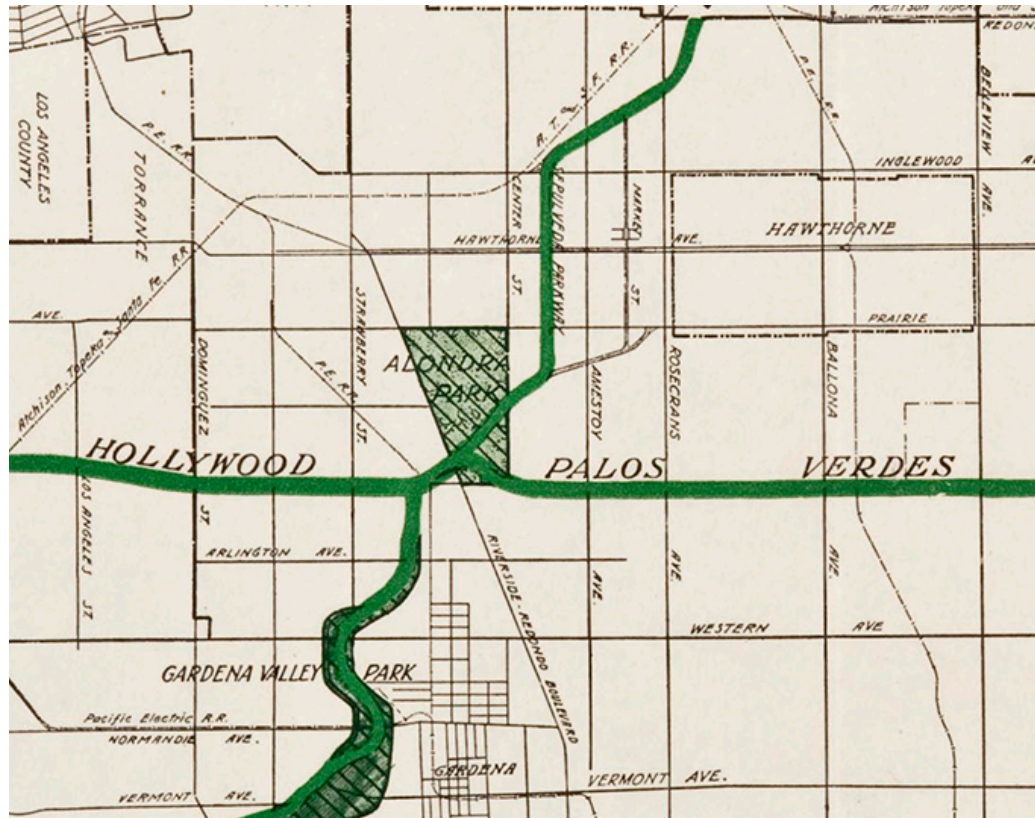


Figure 6.4: View of Alondra Park which provided the connector landscape between Hollywood-Palos Verdes Parkways and an east-west parkway to the beach, 1927. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

Service roads flanked the main throughway and allowed access to homes and businesses without turning from the main road. Working with the Olmsted firm, Charles Cheney wrote O'Melveny about their definition of a parkway:

We do not think a central roadway without side service roads and hence with mixed types of vehicles necessary for local deliveries as comfortable or attractive or of properly character for a parkway as the arrangement shown in the accompanying section. As pointed out in our report entitled "Major Traffic Street Plan for Los Angeles, California, May 1924": A parkway is a route limited to passenger vehicles excluding all commercial vehicles and truck hauling and made exceptionally agreeable as a route of pleasure travel by every possible means, but especially by the feeling of openness that comes with plenty of width and by an ample emframent [sic] of trees, shrubs and other plantations in the parallel, wide sidewalk areas.

A parkway or boulevard may be used mainly by people going to and from business and yet give them a great deal of incidental recreation and pleasure; but ordinarily the justification for such treatment is greatest on routes used also largely by people who are traveling solely for pleasure —as to and from the beaches, the mountains, etc.

Width of boulevards and parkways is necessary to secure ample permanent spaces for planting. Such parking and planting are what make a boulevard desirable, refreshing and useful, as distinct from ordinary traffic routes.¹⁷

While some parkways would be similar to parkways the Olmsted firm had developed in other cities, a park type new to Los Angeles would be pleasureway parks.

¹⁷ Charles Cheney to H.M. O'Melveny, Letter, 7 January 1926, [Hollywood, Palos Verdes Blvd.], #8101, O.A. Papers. For more discussion on the definition of parkways see Frederick Law Olmsted, Jr. to David Farica, Letter, 1 September 1926, [Angeles-Mesa Parkway], #8102, O.A. Papers; Frederick Law Olmsted, Jr., "Border Roads for Parkways and Parks," *Landscape Architecture* 16 (January 1926): 74-84; and John Charles Olmsted to Essex County Park Commission, Letter, 4 June 1915, [Essex County Park System], #2120, O.A. Papers.

PLEASUREWAY PARKS

Chapter VIII of *Parks, Playgrounds and Beaches* was titled, “Recommendations for Pleasureway Parks or Parkways and Related Large Parks,” and included a parkway type commonly employed by the Olmsted Brothers and other landscape architects, Olmsted, Jr. noted, in “Boston, Cleveland, Chicago, Minneapolis, Kansas City, Seattle, Portland, Oregon and Portland, Maine,” though Olmsted, Jr. believed Westchester County’s Bronx River Parkway was the most “up-to-date example in this sort of development.”¹⁸ Its value would be extended to Los Angeles as he wrote:

Under modern conditions with endless expedients for combining the regional pleasure travel functions with those of ordinary residential and business thoroughfares, experience elsewhere points most clearly to one of the most urgent needs of the Los Angeles Region—the need for a system of interconnected pleasureway parks regional in scope.¹⁹

The Olmsted Brothers’ parkway designs were not merely for motorway travel, but were parks in and of themselves, with the pleasureway park an update to the 19th century legacy of the Olmsted firm. In describing Olmsted, Sr.’s pleasure drives in Central Park, New York, Lane Addonizio writes, “The notion of a public road built for the sole purpose of recreational driving—within a landscape itself designed for recreational enjoyment of idealized rural scenery, no less—was altogether new.”²⁰ For the Boston parkways, Charles Eliot argued that two of the most important considerations when deciding upon lands for parks and parkways should thoughtfully consider both scenery and location. Parkway, he wrote, should

highlight a variety of local scenery as well as [those] equitably distributed throughout the community and sufficiently vacant, the latter being the most cost-effective way for municipalities to purchase land. Where the boundary roads are the only roads, the whole strip is properly called a parkway; and this name is retained even when the space between the boundary roads is reduced to lowest terms and becomes nothing more than a shade green ribbon,

¹⁸ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 193.

¹⁹ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 12-13.

²⁰ Lane Addonizio, “Pleasure Driving the Greensward Way: The Role of Roadways in New York’s Central Park,” unpublished, 7.

devoted perhaps to the separate use of the otherwise dangerous electric cars.²¹

The difference between the 19th and 20th century parkway was the evolution of the motor age, especially for Los Angeles with its wide use of the automobile. “The desirability therefore of a few specially agreeable routes of pleasure travel within cities has long been recognized, and experiments in great variety have been tied in the older, larger, and wealthier cities of the world,” Olmsted, Jr. wrote. “But most of those experiments were designed to meet the requirements of horse-drawn vehicles, low speed, and a short radius of travel. Therefore, they fall far short of meeting the needs of the automobile.” Aware of the Bronx River Parkway, Olmsted, Jr. added, “More recently some progressive communities have created routes deliberately designed upon a regional scale and of a character intended to meet the metropolitan conditions of the automobile age.”²² Parkways would not only provide coherence to transportation planning, but as landscape architects, the firm would blend modern needs with a design’s accommodation to the region’s specific ecological conditions. Yet while the modes of transportation had changed between centuries, Olmsted, Jr. remained in agreement with his father that parkways were also parks. Defining pleasureway parks, “in order to provide travel amid pleasant surroundings, parkways necessarily should be greatly elongated real parks. Except that they include roadways for automobile travel, they have almost nothing in common with ‘boulevards’ as that term is generally used in America.”²³

In draft documents, Olmsted, Jr. noted Alondra-Palos Verdes Parkway as one of several pleasureway parks within the Hollywood-Palos Verdes Parkway and one which was to become the “first real parkway in the Los Angeles region,” and an “important link in a pleasure route from the city to the seashore.” Olmsted, Jr. included a conceptual, colored sketch of this parkway in his report (Figure 6.7).²⁴ To confirm this view and better spatially visualize the parkway as proposed, a digital image of the parkway was created using the Olmsted Brothers’ planting plan (Figure 6.8, Figure 6.9 and Figure 6.10).²⁵ The design

²¹ Eliot, *Charles Eliot*, 445.

²² Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 12.

²³ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 13.

²⁴ Within published version of *Parks, Playgrounds and Beaches*, pleasureway parks were not specifically noted. It was only through earlier drafts of this report that the “pleasureway parks” were differentiated from those simply a “parkway.”

²⁵ This image was created in Photoshop. A portion of the original Hollywood-Palos Verdes planting plan used photo-realistic images of the proposed plants and located them over

revealed a verdant planting, largely drought tolerant, and highly colorful. Eucalyptus trees created a high and dense canopy, with the understory plants a mix of ornamental and native plants such as Chinese abelia, tobira, firethorn, and sumac, vegetation once tested for their suitability at the Palos Verdes nursery. Responding to the climate of the site, the parkway planting featured the regional character of Los Angeles in a design that required little to no additional water for irrigation.

This parkway design also merged with existing cultural landscapes in Los Angeles at the time. Eucalyptus trees were a common street tree, lining other roadways like Santa Monica Boulevard, and would have unified the character of planting in the city (Figure 6.11). The lush planting, however, also served another purpose: that of screening the urban and suburban context from the road. Olmsted, Jr. noted the design principle of the parkway was

that it must be completely self-contained and wholly independent of the character of the adjoining private lands for its appearance and character. This means that it must be wide enough throughout for a border of park treatment on each side of the main drive or drives and walks (and bridle paths if any) which will provide pleasant surroundings and shut off the sordidness of the district through which it passes.²⁶

In this way, the parkways visually unified the city, but also separated the urban context through screening. This feature controlled the view of what the firm believed was most impressive in Los Angeles, while concealing views of any distasteful development as well (Figure 6.12).

their symbols on the planting plan for accuracy in location. The view was then moved to the road view in order to understand Olmsted, Jr.'s written intentions and plans for the visual quality of the design.

²⁶ Frederick Law Olmsted, Jr. to H.M. O'Melveny, Letter, 30 December 1925, [Hollywood, Palos Verdes Blvd.], #8101, O.A. Papers.



*Figure 6.7: Alondra-Palos Verdes Parkway, 1927. Colored sketch of the parkway by the Olmsted Brothers.
Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site*

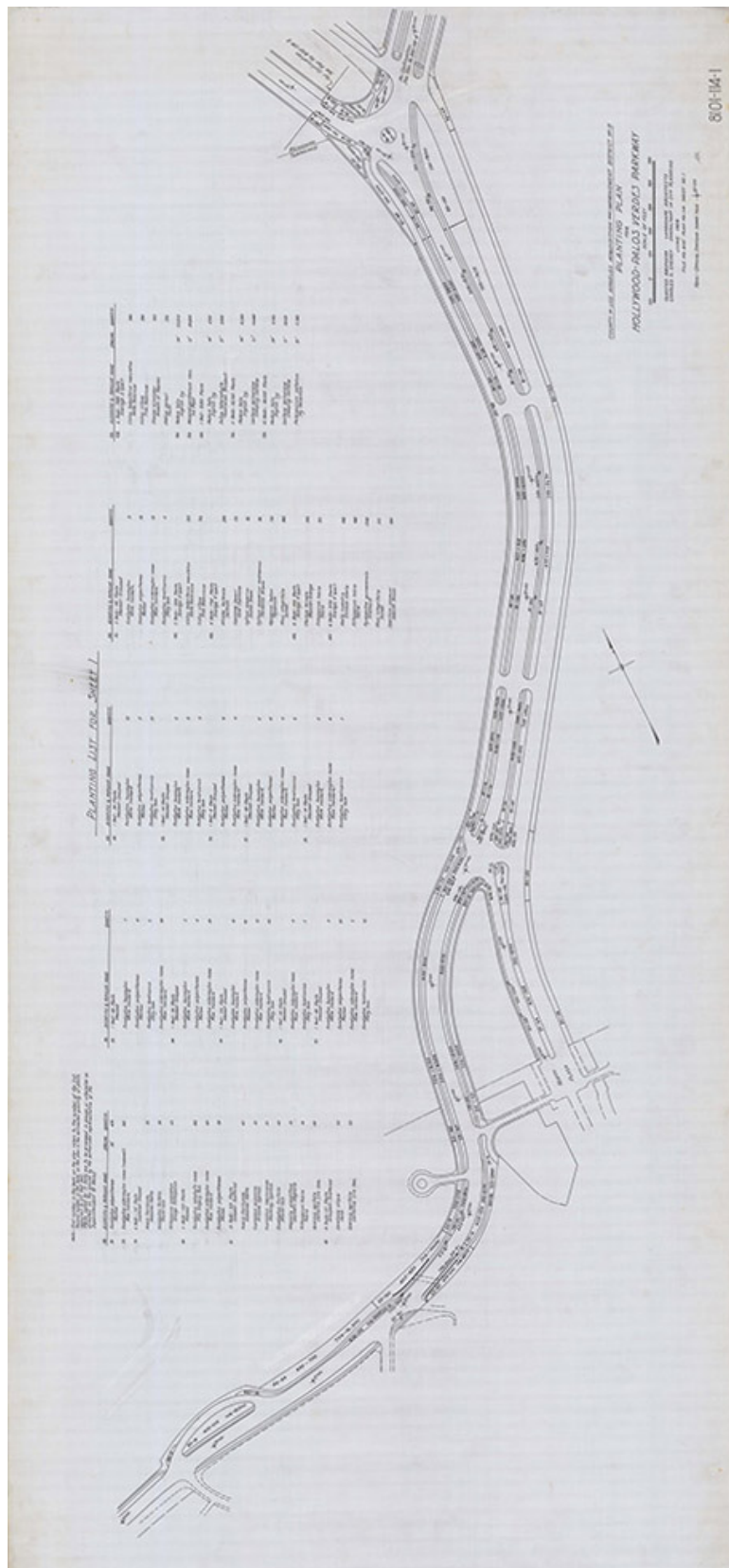
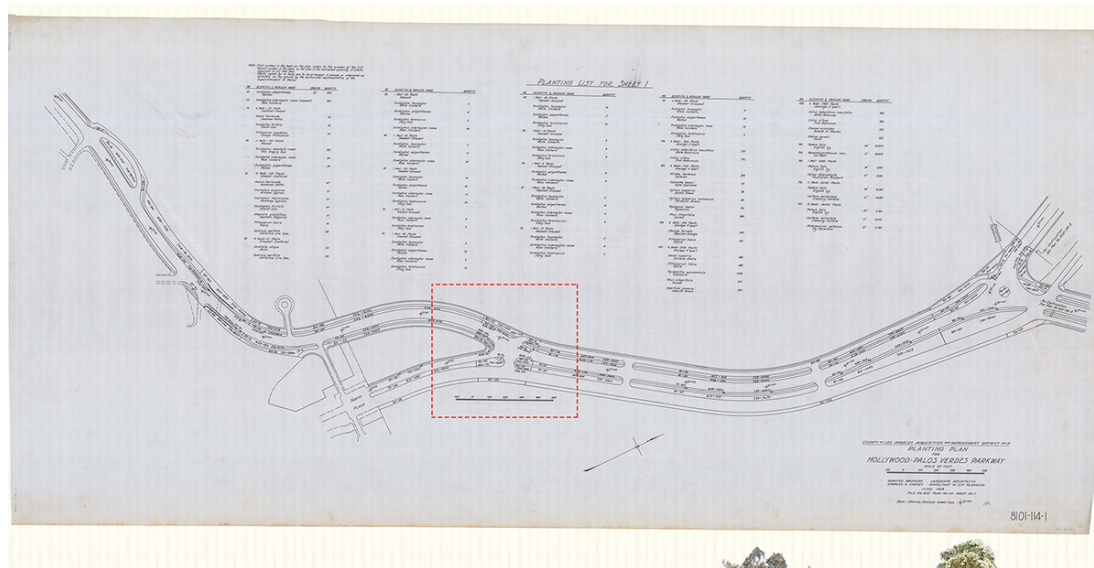


Figure 6.8: County of Los Angeles Acquisition and Development District No. 15 Planting Plan for Hollywood-Palos Verdes Parkway, 1928. Planting plan for a portion of the Hollywood-Palos Verdes Parkway. Credit: Courtesy of the National Park Service, Frederick law Olmsted National Historic Site



Trees (From Left to Right)

Eucalyptus sideroxylon rosea
Rose ironbark

Eucalyptus polyanthemos
Redbox

Eucalyptus calophylla rosea
Pink Gregory Gum

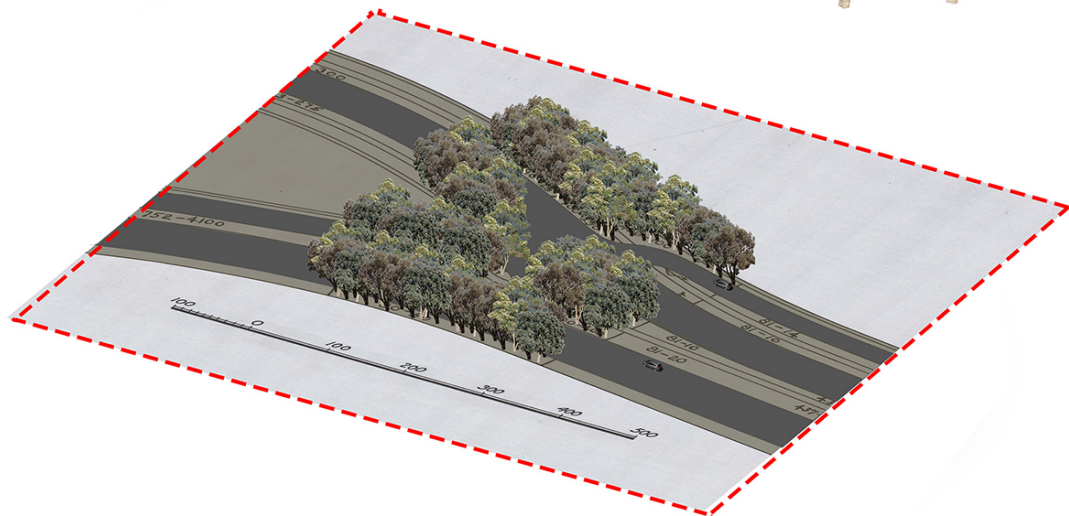
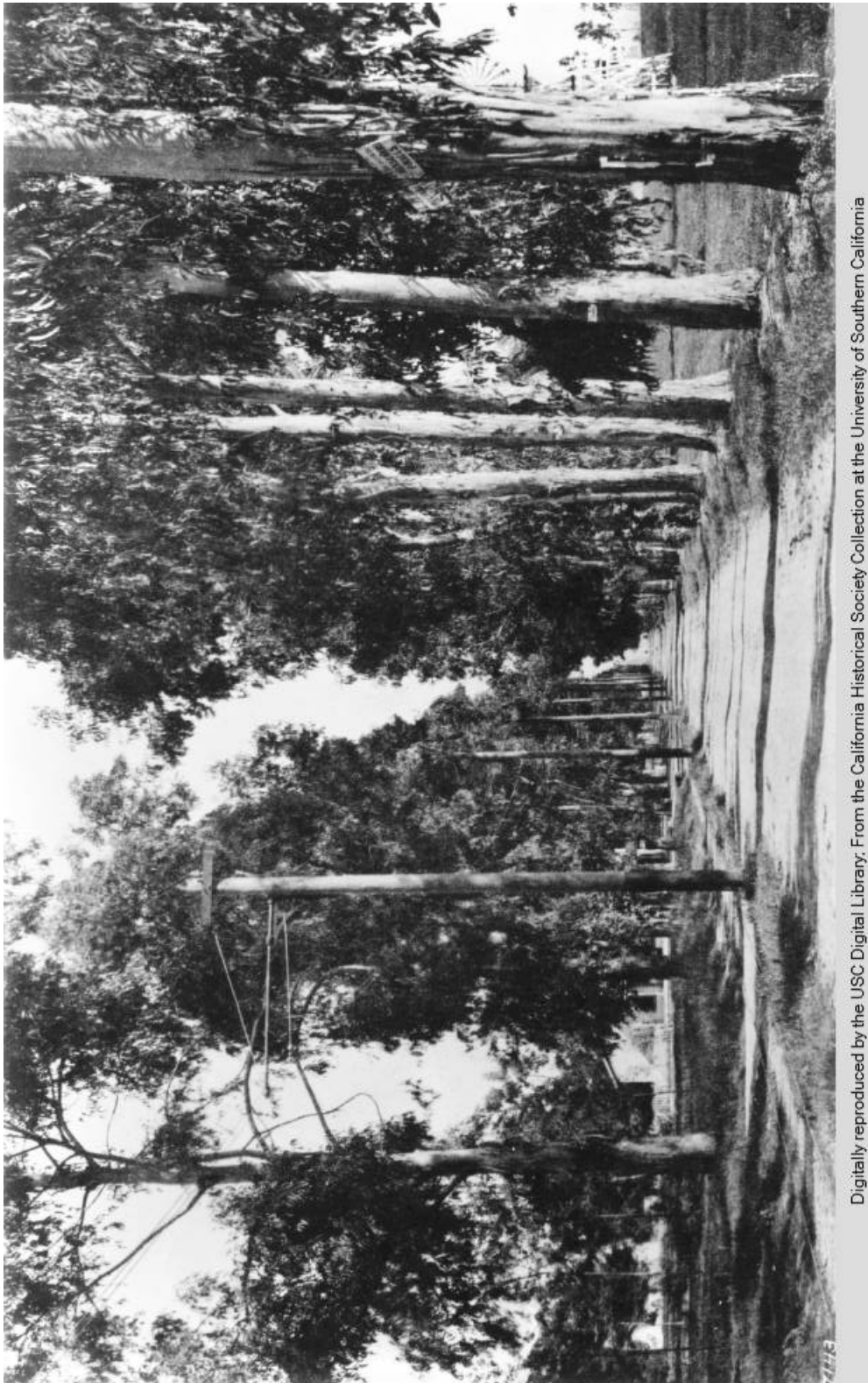


Figure 6.9: Planting plan from segment of Hollywood-Palos Verdes Parkway. Using Photoshop, a portion was cropped and accurate plant images from the planting plan were used to create Figure 6.10 in a photorealistic image of the constructed parkway if it had been built. Credit: Brandon Cornejo



Figure 6.10: Photo realistic image of portion of planting plan of the Hollywood-Palos Verdes Parkway with roadway lined with eucalyptus trees and lush understory. Credit: Izamar Lopez



Digitally reproduced by the USC Digital Library; From the California Historical Society Collection at the University of Southern California

Figure 6.11: View of Santa Monica Boulevard looking east from Beachwood Drive, Hollywood, c. 1900. Eucalyptus was a typical street tree for Los Angeles at the turn of the century. Credit: University of Southern California. Libraries and California Historical Society. Digitally reproduced by the USC Digital Library; From the California Historical Society Collection at the University of Southern California

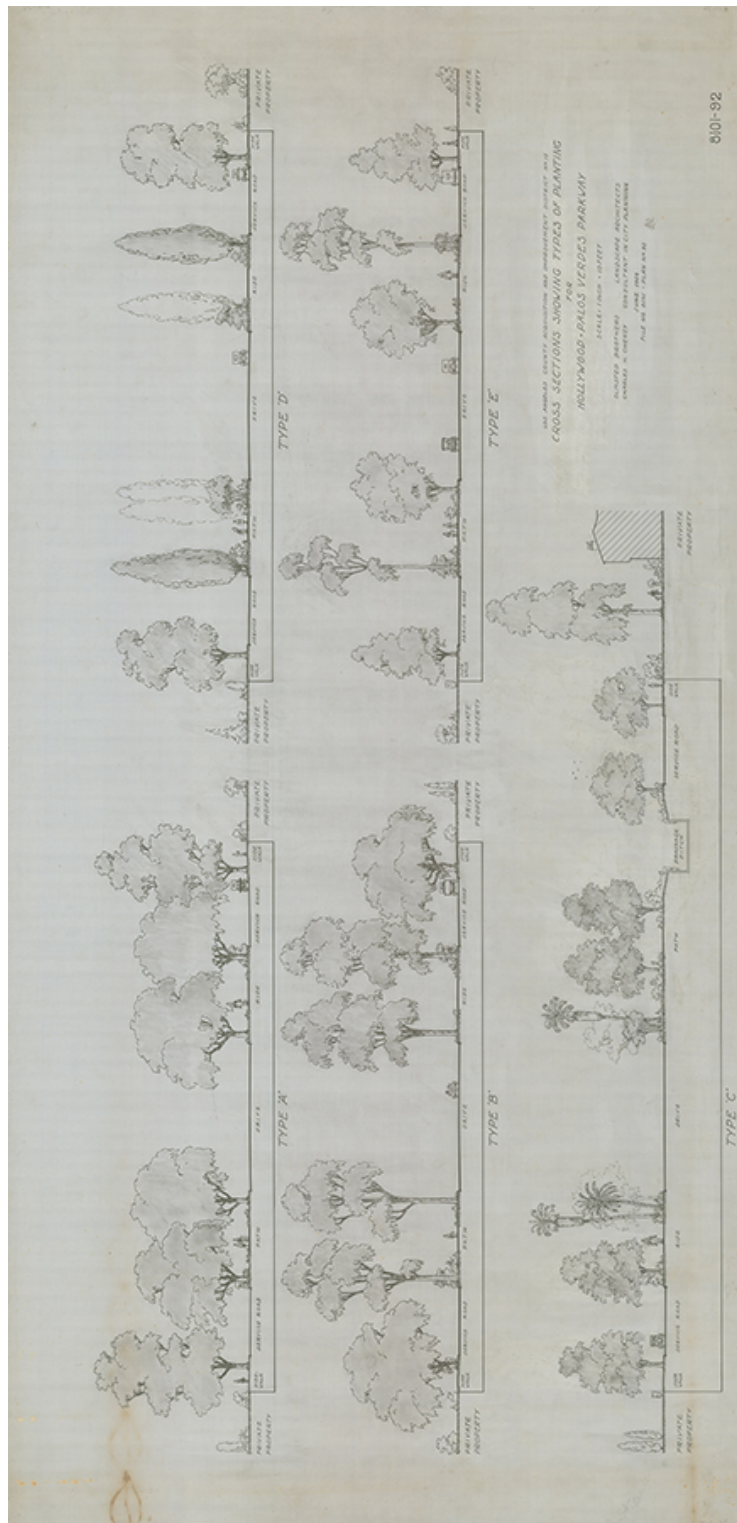


Figure 6.12: Cross Sections showing types of Planting for Hollywood-Palos Verdes Parkway, 1928. In addition to eucalyptus, diversity of street tree plantings would both create variety, screening, and a sense of place in Los Angeles. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

THE MULTIPURPOSE PARKWAY

Parkways and Tourism

Los Angeles had a legacy of automobile touring culture. The Automobile Club of Southern California began charting and mapping Southern California roads in 1906, printing driving routes called “strip maps” beginning in 1912. Phil Townsend Hanna became the editor of *Touring Topics* in 1925, renamed *Westways* after 1934, the magazine for the Auto Club. This Southern California lifestyle publication offered articles on a range of topics from gardening to architecture and of course, automobile touring. The Auto Club claimed that 250,000 tourists visited the region in 1926 in 125,000 motor cars, with Sunday the “motor car touring day” in greater Los Angeles.²⁷ The roadway was not only a motorway, but a destination in itself.

While the warm climate was a contributing factor to the high use of the automobile, the conditions were coupled with an ineffective mass transportation system. By contrast, the pleasureway parks were alternative roadways from the current public transit as Olmsted, Jr. proffered that “street car travel for pleasure [had not kept] pace with the growth of the city” and furthermore, he did not foresee street car travel ever reaching into the mountains where touring trips could explore the region’s natural beauty.²⁸ The Olmsted Brothers’ proposal for new roadways was an opportunity for pleasureway parks to

be distributed that no home will be more than a few miles from some part of it; and should be so designed that having reached any part of it, one may drive within the system for pleasure, and *with* pleasure, for many miles under thoroughly agreeable conditions in pleasure surroundings. Free from interruption of ordinary urban and suburban conditions...driving...may be over the pleasantest if not always the shortest route to some other recreational objective.²⁹

²⁷ Kevin Starr, *Material Dreams: Southern California Through the 1920s* (New York and Oxford: Oxford University Press, 1990), 80, 96, 314.

²⁸ Olmsted Brothers and Bartholomew, *Parks, Playgrounds, and Beaches*, 28-29. See also Frederick Law Olmsted, Jr. to Mr. Cortelyou, of the State Highway Staff, “Memorandum as to Certain Points to be Considered in Laying Out Roads in Scenic Areas, Especially Forest and Mountain Areas,” 12 March 1926, [Los Angeles County, General], #8100, O.A. Papers.

²⁹ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 13.

Pleasureway parks were intentionally routed by cultural elements such that the roadway would highlight what the Olmsted Brothers believed were beautiful and special about Los Angeles. In *Parks, Playgrounds and Beaches*, the parkways connected Beverly Hills' Los Angeles Country Club, Exposition Park by University of Southern California, the Selig Zoo, and a proposed botanical garden, later to become the Los Angeles County Arboretum and Botanic Garden, to more vernacular cultural icons of the period such as oil derricks in Los Cerritos and citrus groves in Lemon Heights. Parkway routing was also used as community links such as the San Fernando Pleasureway which connected a number of interesting locations beginning at the San Fernando Reservoir, passing by Olive View Sanatorium, to terminate at Pacoima Wash. The Olmsted Brothers' affinity for Spanish influences as a form of regional California identity routed other parkways by historic Spanish and Mexican sites including the San Fernando Mission, Pio Pico Adobe House, Old Rancho Escorpion and the Spanish rancho later owned by California governor Henry T. Gage. These restored and authentic Spanish buildings along the parkways celebrated California Spanish history for day trips for residents and tourists alike.

Parkways and Water

In addition to the roadway as a cultural amenity, the Olmsted Brothers' parkways were also designed as an ecological mitigant for the often-catastrophic flooding of the Los Angeles rivers. Starting in the 19th century, the Olmsted firm carefully designed with water. In his work with the Boston Parkway system, Charles Eliot advocated for maintaining the existing hydrology of a site:

If the courses of brooks, streams, or rivers can be included in parks...several advantages will be secured in one stroke. The natural surface drainage channels will be retained under public control where they belong; they will be surely defended from pollution; their banks will offer agreeable public promenades; while the adjacent boundary road, one on either hand, will furnish the contiguous building land with an attractive frontage.³⁰

In the 19th century design for Essex County Parks, John Charles Olmsted also discussed parkways as they related to hydrology. He was of two minds: on the one hand, laying out

³⁰ Eliot, *Charles Eliot*, 445.

the parkway in a low valley or swamp could socially benefit the community through drainage by “discouraging bad slums and improving general sanitary conditions.” On the other hand, he urged the importance of preserving the natural water courses for their future value:

Parkways both for the benefit of the general public using them and for immediate neighborhoods should include, where practical, picturesque natural features, such as ponds, brooks, low meadows, woods and open groves...securing lands for parkways in low grounds where benefits would come in future rather than in present.³¹

In this normative aspect of their practice, Frederick Law Olmsted, Jr. noted in several reports why natural hydrologic protection was important. In a 1917 speech to attendees of the Ninth National Conference on City Planning in Kansas City, Missouri, he remarked that urban rivers were problematic in nearly every city, especially with regard to stormwater. Typical of most cities was development encroachment along these river edges when the seasons were dry, occupied by not only residential development, but industrial and railroad rights-of-way. To mitigate for the cyclical catastrophe, he discussed how Kansas City was creating a pleasure drive, or parkway, along the edge of the Blue River to protect the lowlands from flooding through embankments or levees designed to provide for stormwater discharge of the valley. Protecting the river edge also created public space for recreational use. Olmsted, Jr. called this a “water parkway” that “aside from the park features of the project, a well-conceived comprehensive plan for the economic development of the valley lands, for flood protection, for trunk sewers, and for main thoroughfares, would be a sound piece of city planning.”³²

The proposed Los Angeles park and parkway system linked all the natural and man-made water elements in the county, from reservoirs to beaches to rivers. An explanation could be that Olmsted, Jr. perceived these locations as the most scenic areas, perhaps in recognition of the soothing psychological experience of water views. Reservoirs like Chatsworth had picturesque qualities, but they were also highly functional as this particular reservoir stored 7,400 acre feet of needed drinking water (Figure 6.13). When functionality

³¹ John Charles Olmsted to Mr. Bramhall and Mr. Cole, Letter, 23 December 1898, [Essex County Park System], #2120, O.A. Papers.

³² Frederick Law Olmsted, Jr., *City Planning Needs of Kansas City with Special Reference to the Treatment of Water Courses* (paper presented at the conference Ninth National Conference on City Planning, Kansas City, Missouri, 1917), 89.

was combined with aesthetics, Olmsted, Jr. felt the community was “securing a double return on the investment.”³³ Locating the parkways along the water elements, however, had another value, an ecological purpose when the design was able to accommodate the dual conditions of drought and flood. Olmsted, Jr. recognized that Los Angeles had an “underground river” and through his long-time residence in Palos Verdes

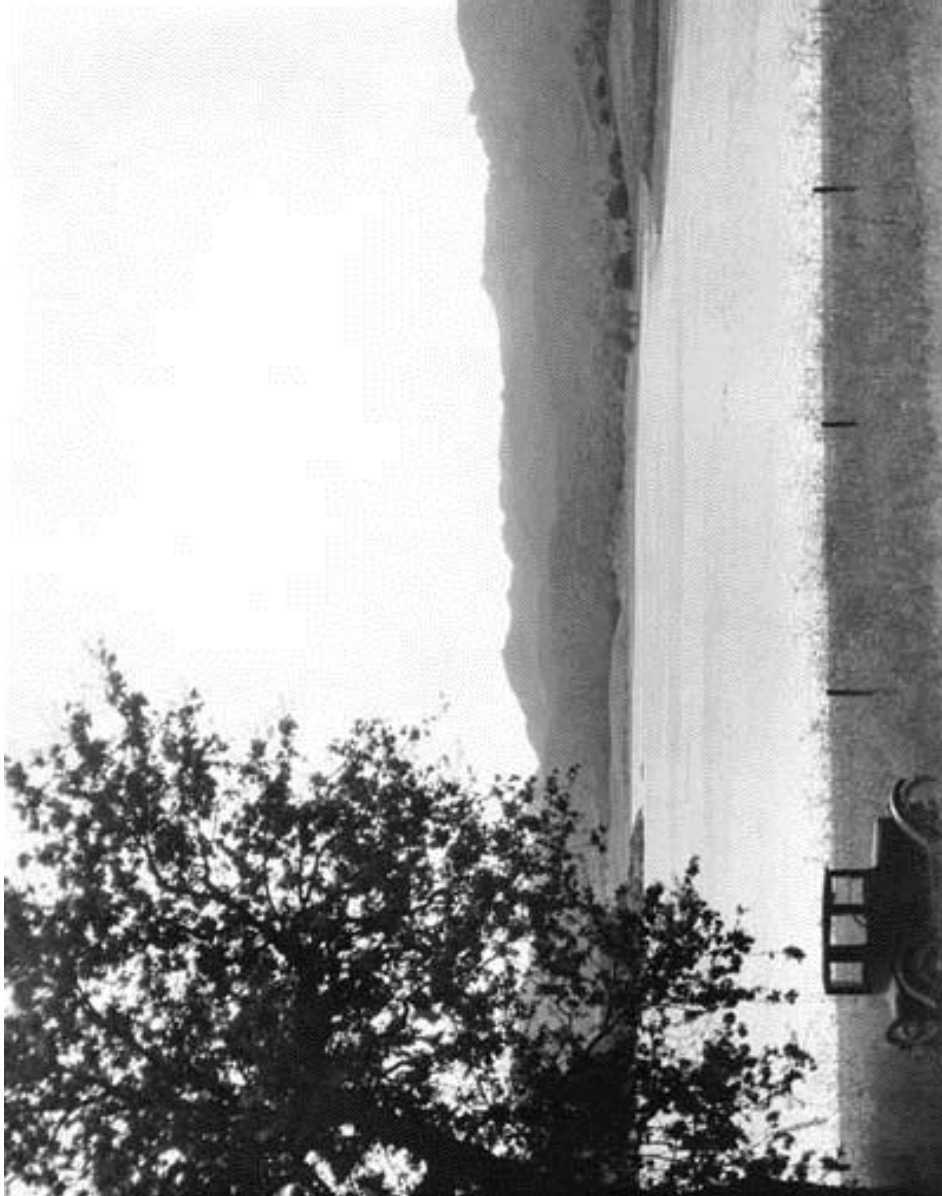


Figure 6.13: Chatsworth Reservoir, Los Angeles, 1925. Olmsted, Jr. felt that the reservoirs offered picturesque qualities and routed the parkways to pass by them. Credit: Historical Photo Collection of the Department of Water and Power, City of Los Angeles

³³ Frederick Law Olmsted, Jr., *The Relation of Reservoirs to Parks* (paper presented at the conference Ninth National Conference on City Planning, Boston, Massachusetts, 1899), 3.

well-understood local ecological conditions and natural hydrology. Palos Verdes' roads, for example, were designed to manage stormwater. As previously discussed in Chapter 5, Olmsted, Jr. and his associates designed them such that stormwater would sheet flow to the road edges, irrigating the native and hardy plants along its edges and then percolate into the soil negating storm drains. Carefully graded parkways that provided an ecological solution appeared merely aesthetic to the public, but mitigated for flooding while maintaining natural hydrologic patterns.

The parkways for Los Angeles County would go beyond mitigation to a watershed-level scale and address both issues of water shortage and water inundation that were commonplace in Los Angeles. Purchase of lands prone to flooding, Olmsted, Jr. argued, would equally provide multiple purposes. Additionally, control of the water edges also solved water conservation problems, especially for Los Angeles with the "opportunities for combining [flood control and water conservation], at little extra cost," Olmsted, Jr. wrote:

Along natural drainage lines...Such lands have to be acquired only once, yet would serve a double purpose—flood-control use and park use—not conflicting but positively beneficial to each other. Especially would this be true of the land acquired as a margin of safety; the open land skirting the chief flood control area which prudence would include in the purchase.³⁴

What was not explicitly stated was that while protection of the river edge safeguarded human lives and property, it also protected the *river* itself. The width of parkways served as easements against development and allowed the river to maintain its natural flooding pattern (Figure 6.14). As seen in the design for Sepulveda Parkway, a wide drainage channel ran between the two border roads. In a drawing of its typical cross section, water could fill the drainage channel and when occasionally flooded, extend across the pedestrian paths, motorway, bicycle route, and service road before harming any structures (Figure 6.15).

The Lower San Gabriel River Parkway was another park with flood control design. Olmsted, Jr. described this proposed park:

From the San Gabriel River mouth below Anaheim Road, northward to the Whittier Narrows, a distance of over 17 miles, plans are now being considered for acquiring a channel for flood control for the San Gabriel River. The river bed is several hundred feet wide but

³⁴ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 16.

under control may be narrowed and deepened, thus destroying the not unpleasant tree-bordered wash that now exists. For a parkway, it would be far more attractive to preserve much of the character of the present bed, to develop border roads and dikes farther apart in a less formal manner and to make some uses of the land in the bed of the stream during most of the year when little or no water is running.³⁵

For this portion of river way that needed a wide berth for stormwater, Olmsted, Jr. recommended a parkway that was 1,000 feet wide as assurance against private property damage and at the same time maintained the regional character of the landscape without “seriously injuring the landscape value of the river bed.”³⁶ In an appreciation of the native vegetation, Olmsted, Jr. also recommended preserving the enclosure of this parkway with its “special effects of foliage” such as cottonwoods, sycamores, willow and poplars, along with wild grapes and eucalyptus (Figure 6.16).³⁷ Within *Parks, Playgrounds and Beaches*, what was labelled as “Typical sections for parkways, showing how various slopes may be treated in a way to produce interesting variety and to protect good view and interesting scenery,” was actually section views that reflected a variety of necessary widths to accommodate the varied flood zones. The lower and flatter river washes needed wide spaces while the upper watershed waterways flowed at a quick pace in a narrower corridor (Figure 6.17). These variances, Olmsted, Jr. wrote, would handle maximum floods while reserving permanent areas for percolation into the ground.³⁸ With infrastructure located in the floodplain, Olmsted, Jr. believed it would be a relatively easy repair after inundation. Some parkways were explicitly named “flood channel parkways.” For example, a parkway at the mouth of the San Gabriel River in Long Beach with an outflow into the ocean was proposed as two parkways along the water edge, several hundred feet wide such that the “entire river mouth can be treated as a broad, open parkway”³⁹ (Figure 6.18). Another flood channel parkway showed the existing street at Wilmington and Redondo Boulevard

³⁵ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 124.

³⁶ Ibid.

³⁷ Blake Gumprecht argues in *The Los Angeles River*, that for many newcomers, the Los Angeles River was a landscape that they wanted to clean up and beautify. These new residents’ ideas about the aesthetic quality of a river were shaped by their vision of river ways from the Midwest and East Coast, 116.

³⁸ Olmsted Brothers and Bartholomew, *Parks, Playgrounds, and Beaches*, 14.

³⁹ Olmsted Brothers and Bartholomew, *Parks Playgrounds and Beaches*, 123.

remaining a thoroughfare, with the pleasureway park set into the low elevation point in the area.

Perhaps the most developed portion of the plan for the Hollywood-Palos Verdes Parkway was the east-west pleasureway park of Gardena Valley Park and Parkway Reservation and an adjacent site labeled on historic maps and the report as “Nigger Slough Reservation.”⁴⁰ The slough was a site where the Los Angeles River was too low in elevation to outlet to the ocean and pooled in a series of three lakes northeast of Wilmington, known as the Watson Lakes. Typically marshy, this area was mostly undeveloped, but Olmsted, Jr. had a vision that would make it highly recreational. As this landscape was subject to very rare, but heavy flooding, Olmsted, Jr. noted the design could be used for park purposes even if flooded. The Gardena Valley Parkway’s extension south into Nigger Slough Reservation was described as a “broad flat flood plane [sic]...unfit for residential or commercial uses [and therefore] should be made into a park”⁴¹ (Figure 6.19).

⁴⁰ The origin of this place name is best explained in a report by Bonita Miramontes, with the name based on Joshua William Smart, an African American man who operated a hog farm in the area after the American Civil War. The slough has had a variety of name changes including Dominguez Channel, then Dominguez Laguna by the Los Angeles Board of Supervisors in 1938. The derisive name was still in use in 1930, however. Today, the slough no longer exists in its original form as it was drained, filled, and built over. Within this thesis, the place name is noted as “Gardena Slough.” See Bonita Lucille Braddock Miramontes, “Research Resource Materials on the Origins of “Nigger Slough” in the Dominguez Family Papers” (Department of Archives and Special Collections, California State College, Dominguez Hills, 1977), 5, 8; See also Susan K. Hikida, “Community History Resource Project, Category I: Immaterial Nigger Slough” (Department of Archives and Special Collections, California State University, Dominguez Hills, 1984), 2-3.

⁴¹ Olmsted Brothers and Bartholomew, *Parks, Playgrounds, and Beaches*, 120.



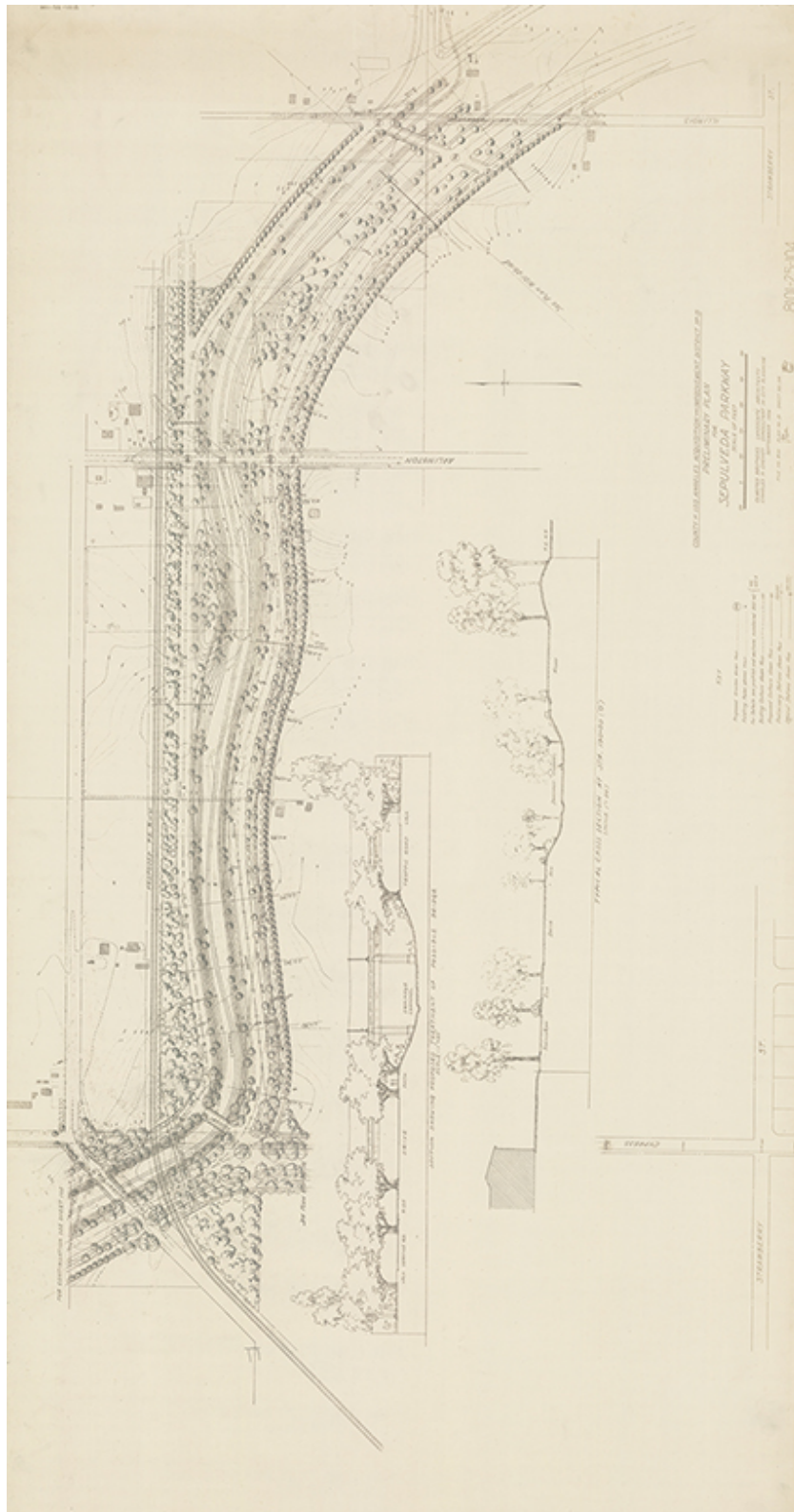


Figure 6.15: Preliminary Plan of Sepulveda Parkway, 1928. Plan and sections showing drainage solution along the parkway. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

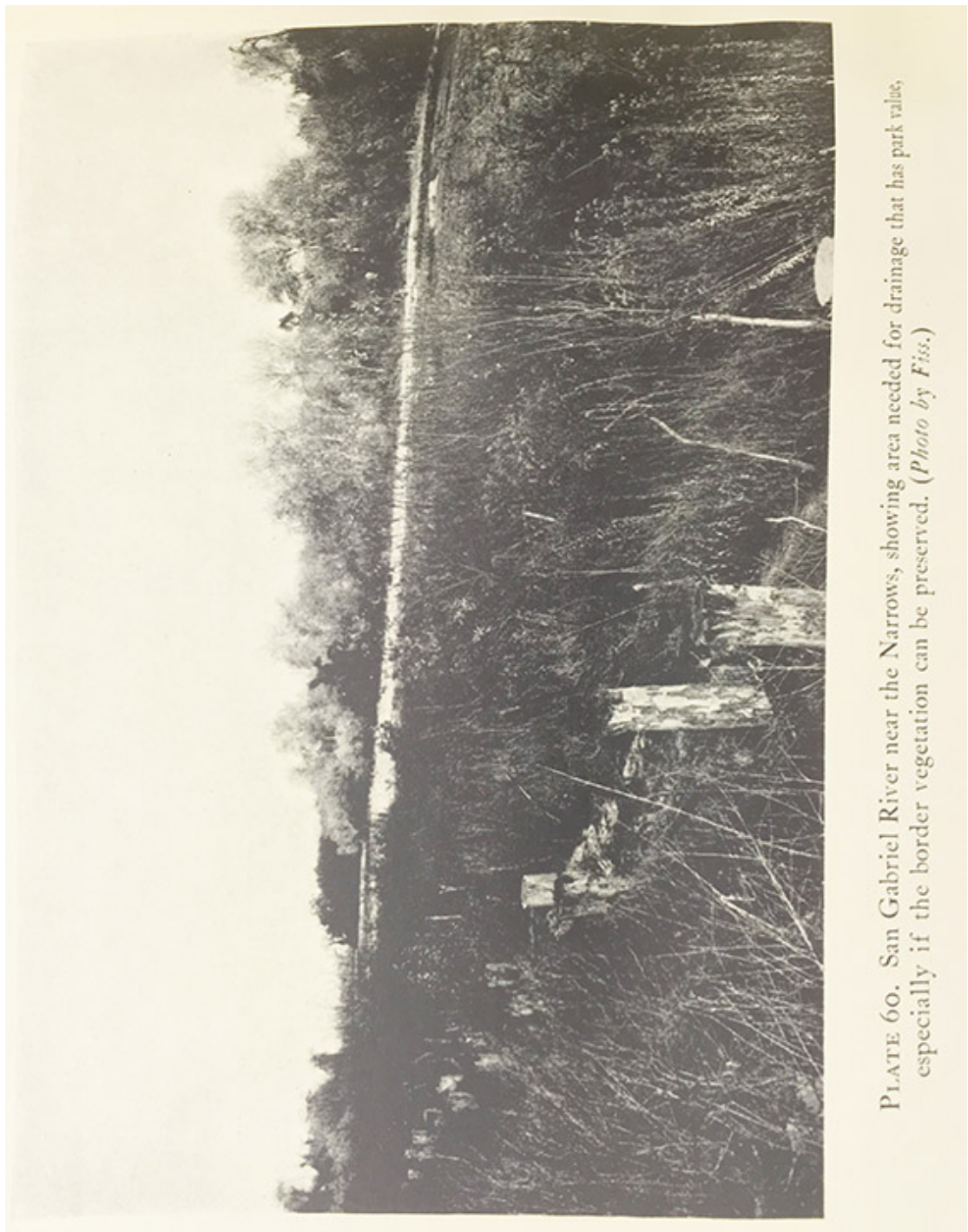


PLATE 60. San Gabriel River near the Narrows, showing area needed for drainage that has park value, especially if the border vegetation can be preserved. (*Photo by Fiss.*)

Figure 6.16: San Gabriel River near the Narrows, 1930. Olmsted, Jr. recommended preserving the native plants of the San Gabriel River along the proposed parkway edge. Credit: Parks, Playgrounds and Beaches. The Huntington Library, San Marino. Digital image by Christine O'Hara

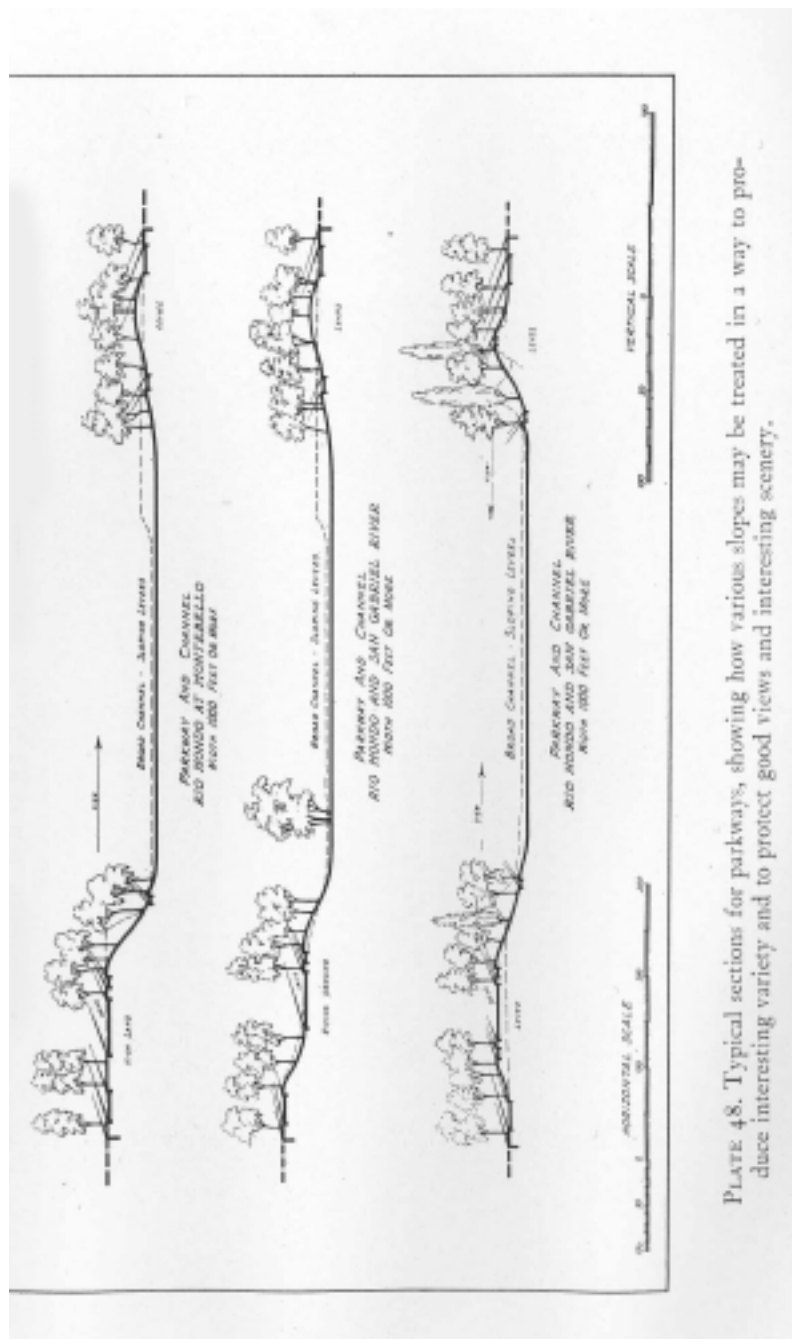


Figure 6.17: Typical Sections for parkways from Parks, Playgrounds and Beaches, 1930. Parkway and Channel, Rio Hondo and San Gabriel River showing varying widths needed for flood control. Credit: Parks, Playgrounds and Beaches. The Huntington Library, San Marino. Digital image by Christine O'Hara Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

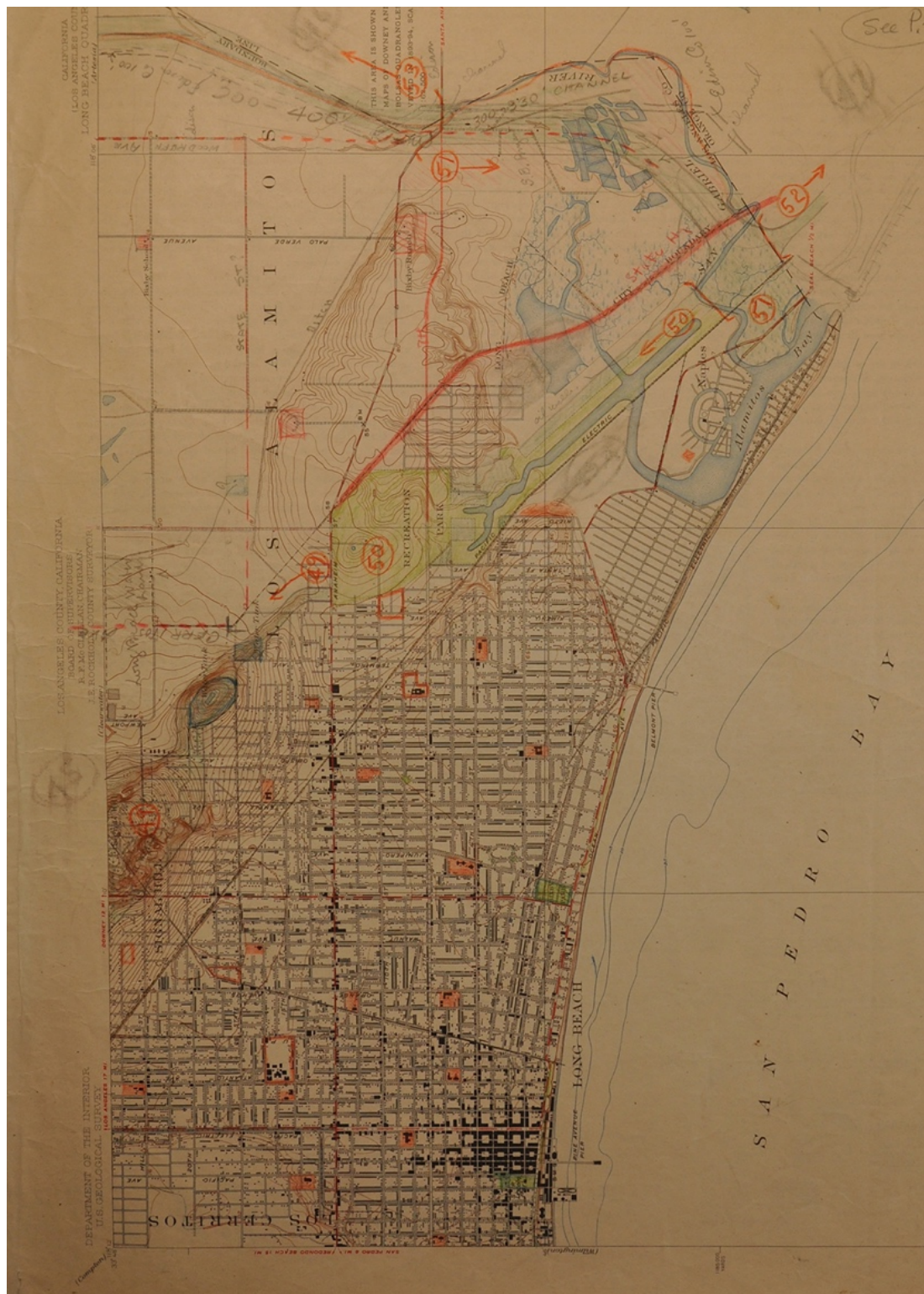


Figure 6.18: Annotated USGS by Olmsted, Jr. for Long Beach Recreation Park (located as 50), 1929. Some parkways were explicitly named “flood channel parkways” such as this one at the mouth of the San Gabriel River that was proposed as two parkways along the water edge, several hundred feet wide such that the “entire river mouth can be treated as a broad, open parkway.” Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

Looking more carefully at the design for this recreational park and parkway, the existing Vermont Street was abandoned in lieu of a new roadway crossing the water by bridge. The slough was deepened into a lake with islands picturesquely scattered within it. Playfields that would not suffer by occasional inundation edged the water. A boat house, band stand, and overlook shelter were placed on another water edge. Rather than a swamp, the site served as a recreational element with pleasureway park along the edges (Figure 6.20 and Figure 6.21). The extension of a wide parkway further protected the water from private development in an appropriate land use for the ecological conditions.

In a long appendix discussion in *Parks, Playgrounds and Beaches*, Olmsted, Jr. republished a letter from May 21, 1926 to the Board of Supervisors of Los Angeles County regarding “Nigger Slough and Other Lands Lying Below Possible Drainage Levels.” Olmsted, Jr.’s concern was that County Flood Control engineers had underestimated flood levels in this and other areas of low elevation, with Olmsted, Jr. believing that during maximum rain years, the water levels could be five to ten times the estimated engineered figure. Foretelling that the area in the floodplain would be infilled by “industrial plants, crossed by street and railroad embankments” and that the “openings through which will tend to limit the possible capacity of the channel and increase the graduate of flood water discharge,” he warned that in order to reduce serious injury to public health, safety, and general welfare of the community that agriculture and recreation become the “principle uses to which such low land can properly be put without the large expense of filling them up to a level safe from disastrous flooding.”⁴² He noted in the letter that park plans for the slough had been completed with the understanding that the land was permanently subject to flooding during the wet season. Furthermore, he added, “if the permanent determination of the economically practical water levels, during dry weather and during floods, which can be permanently ensured in the Nigger Slough Basin is not made before the park improvements are actually installed...these park improvements will have to be constructed on a gamble.”⁴³ While Olmsted, Jr. wrote this letter in 1926 during a period of drought, he was correct as the disastrous 1938 flood in the region surpassed estimates and created \$40,000,000 of county-wide damage (Figure 6.22).

⁴² Olmsted Brothers and Bartholomew, *Parks, Playgrounds, and Beaches*, 151.

⁴³ Olmsted Brothers and Bartholomew, *Parks, Playgrounds, and Beaches*, 151.

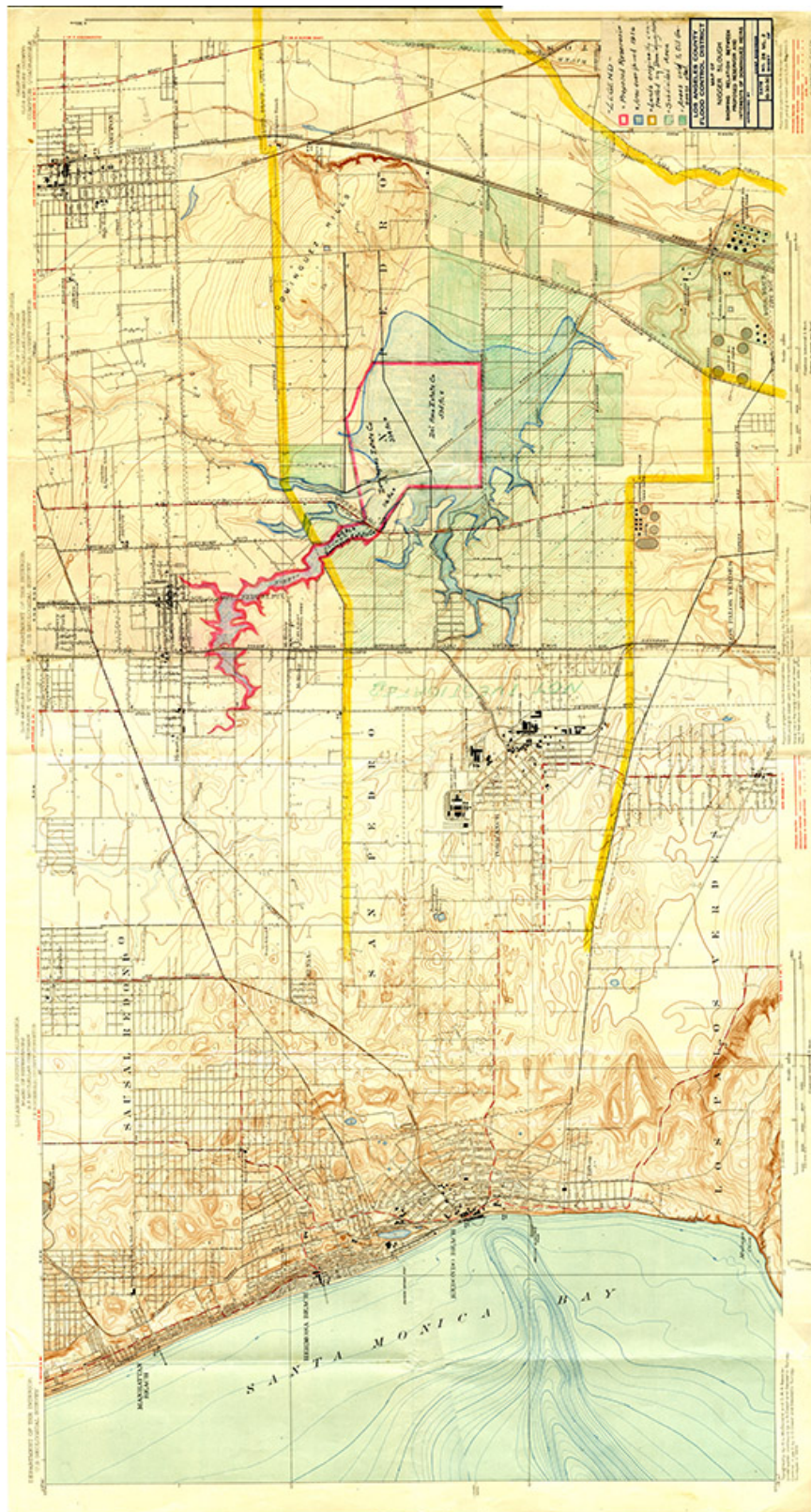


Figure 6.19: Map of Gardena Slough, 1930. Blue outlines show extent of flooding patterns with notation of Nigger Slough on historic map. Credit: Rancho San Pedro Reference Collection, Courtesy of the Department of Archives and Special Collections, California State University, Dominguez Hills

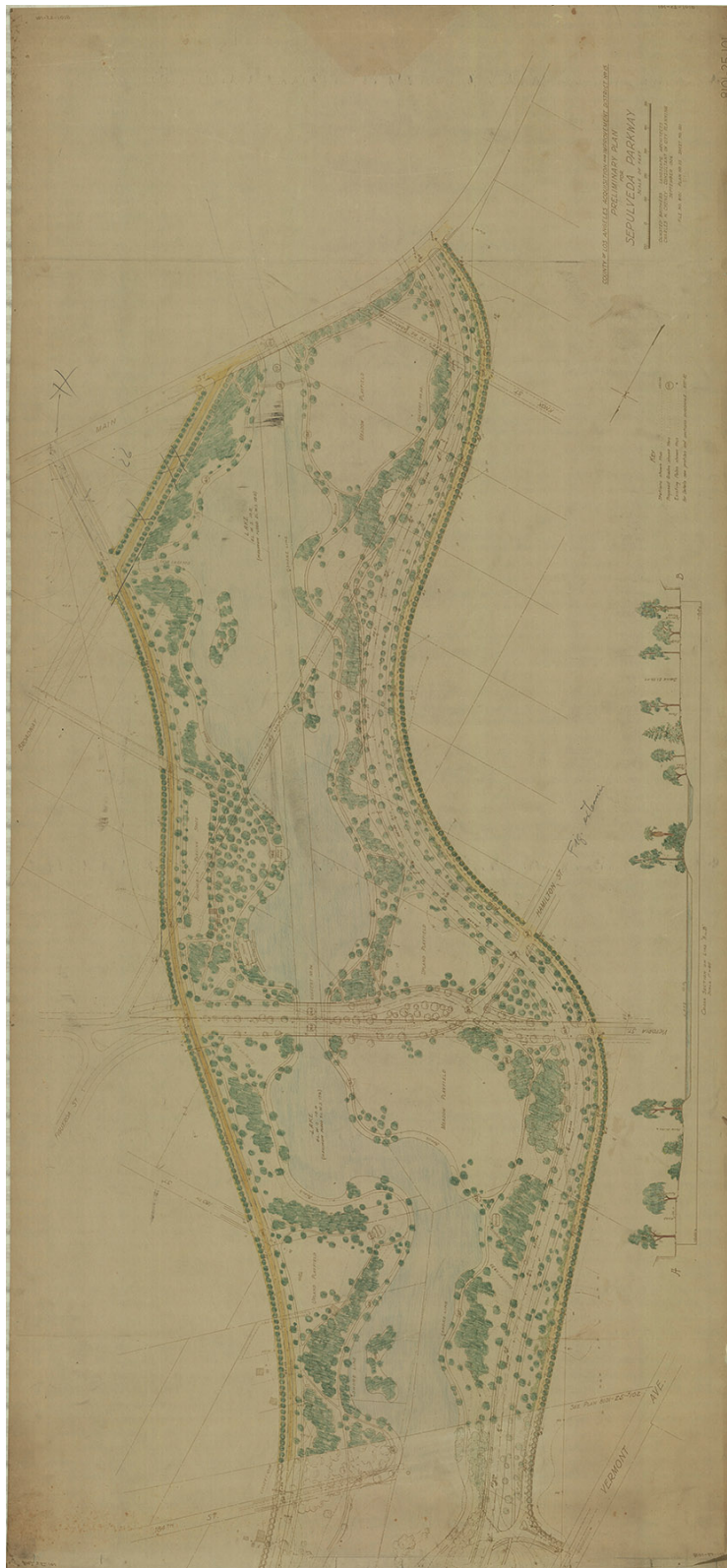
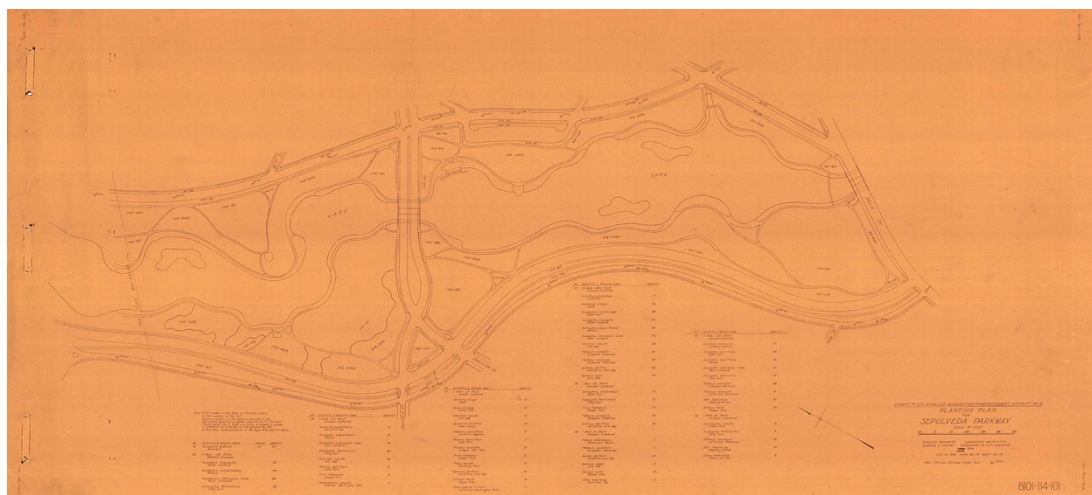


Figure 6.20: Preliminary Plan for Sepulveda Parkway, 1928. Design is for Gardena Slough which shows the parkway running along the edge of the slough with islands, playfields and a band stand, boat house, and overlook shelter as amenities in the recreational park. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site



NO.	SCIENTIFIC & POPULAR NAME	QUANTITY
105.	3 Beds - 1050 Plants Grouped - Scattered	
	<i>Cupressus macrocarpa</i> Monterey Cypress	105
	<i>Eucalyptus corynocalyx</i> Sugar Gum	105
	<i>Eucalyptus polyanthemis</i> Redbox	55
	<i>Eucalyptus sideroxylon rosea</i> Rose Ironbark	156
	<i>Eucalyptus tereticornis</i> Slaty Gum	105
	<i>Platanus orientalis</i> European Planetree	208
	<i>Platanus racemosa</i> California Planetree	55
	<i>Salix babylonica</i> Weeping Willow	105
	<i>Schinus molle</i> Pepper Tree	156
106.	1 Bed - 80 Plants Grouped - Scattered	
	<i>Eucalyptus robusta</i> Brown Gum	12
	<i>Eucalyptus tereticornis</i> Slaty Gum	8
	<i>Platanus racemosa</i> California Planetree	40
	<i>Salix babylonica</i> Weeping Willow	12
	<i>Ulmus americana</i> American Elm	8

Figure 6.21: County of Los Angeles Acquisitions and Improvement District, No. 15 Planting Plan for Sepulveda Parkways, 1928. Planting plan for Gardena Slough included both drought tolerant as well as riparian trees to accommodate changing flood patterns. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

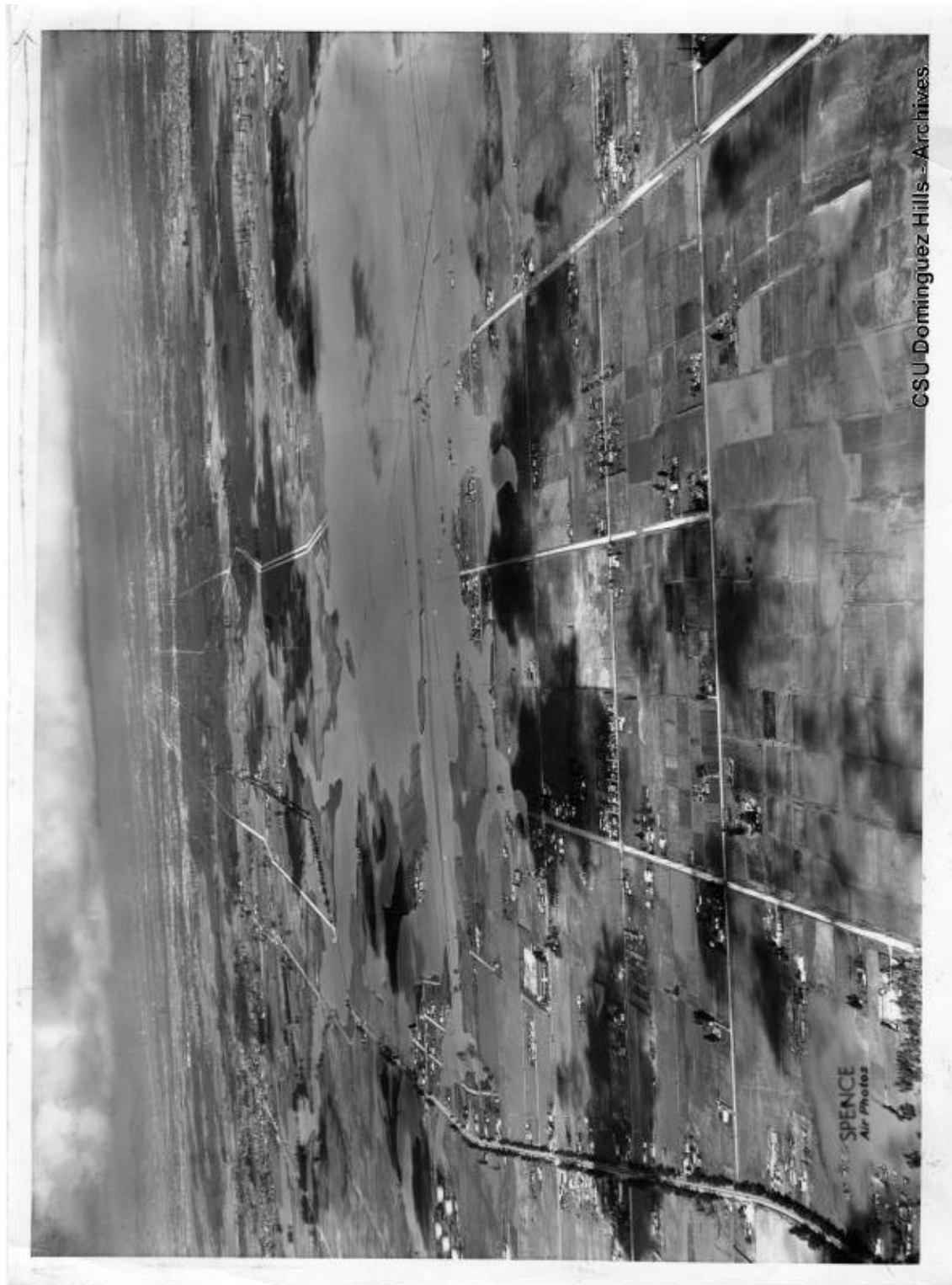


Figure 6.22: Massive flooding of Gardena Slough, 1938. Roadways were buried underwater and floodwater around the slough significantly spread over property and housing. Credit: Rancho San Pedro Reference Collection, Courtesy of the Department of Archives and Special Collections, California State University, Dominguez Hills

PARKWAYS AND SOCIAL CLASS

The original placement and distribution of parks and parkways was such that “no home will be more than a few miles from some part of it.”⁴⁴ The implications for routing were seemingly equitable, with the roadway’s adjacency to all Los Angeles residents. However, this was not the case based on confidential letters. When O’Melveny first wrote to the Olmsted firm in 1925 about his concerns for a routing alternative to the Wilshire Boulevard plan through downtown, he said, “I have been over the route, and practically one half of it up to the time you hit Bimini Baths or Wilshire Boulevard is through Shanty Town.”⁴⁵ It is unsurprising that with this bias O’Melveny would prefer not only changing the routing, but also changing the name of the roadway to “Hollywood-Palos Verdes Parkway” to better align with a high-class development and the romance of the entertainment industry in Los Angeles. It was a marketing decision on O’Melveny’s part. Olmsted, Jr. quickly responded within the week,

As between improving Wilshire Boulevard and opening a new boulevard route to Santa Monica south of Wilshire though ‘Shanty Town,’ I cannot off hand say very much because I have not had opportunity of examining the latter route in detail. In general, it can be said that there are obvious immense advantages in locating such a boulevard where first class residential developments are likely to occur along it rather than through a district which is destined to low grade development.⁴⁶

Olmsted, Jr. wrote O’Melveny that with his design “the districts traversed are more varied in the character of established private developments...including some high class and attractive development, some second class,” though not as bad as any of the miles of “Shanty Town.” Furthermore, Olmsted, Jr. added, a parkway might be “expected to have a decidedly beneficial influence on the character of the surrounding development and to result in at least good second grade residential distinction of a rather attractive sort.”⁴⁷ While occasionally passing through what he considered “second-grade lands,” more

⁴⁴ Olmsted Brothers and Bartholomew, *Parks, Playgrounds, and Beaches*, 13.

⁴⁵ H.M. O’Melveny to Frederick Law Olmsted, Jr., Letter, 24 December 1925, [Hollywood, Palos Verdes Blvd.], #8101, O.A. Papers.

⁴⁶ Frederick Law Olmsted, Jr. to H.M. O’Melveny, Letter, 30 December 1925, [Hollywood, Palos Verdes Blvd.], #8101, O.A. Papers.

⁴⁷ Ibid.

affluent areas met his siting criteria of a location of “fine and liberal character” and a logically defended parkway system routed from the coast to his personal design of Palos Verdes. Whether hubris or a marketing ploy, Olmsted, Jr. wrote O’Melveny, “coming from one who is connected with the Palos Verdes Project this sounds like the ordinary line of exaggerated ‘sales talk.’ It is in fact solid sound sense which any competent expert on park systems would back up.”⁴⁸ The unobstructed ocean views from Palos Verdes Coast Road was the coup de grâce of the Los Angeles parkways design.

The location of parkways in Los Angeles were a result of not only ecological factors, but social ones as well. One might believe that Frederick Law Olmsted, Jr.’s careful approach to design with natural systems would extend to improvements of *all* communities in Los Angeles, not just the affluent ones. As an expert city planner, Olmsted was well aware that design improvements by his firm raised property values. As early as 1910, Olmsted, Jr. and co-authors Bion Arnold and hydraulic engineer John Freeman had written in their report *City Plan for Pittsburgh* to layout new thoroughfares in the “less expensive property which is generally to be found in the spaces between existing thoroughfares of recognized importance.”⁴⁹ Wouldn’t location of parkways provide a double benefit of lesser expensive land coupled with economic improvement in adjacent underserved communities? By 1925, Olmsted, Jr. was a pragmatist, despite his entrepreneurial leanings as a designer. In Los Angeles, he argued that placement of the parkways through “low grade developments” both ruined the appearance from the road with the “sordidness of the district” and furthermore, these low economic communities would not have property assessments high enough to recoup the cost of the parkway improvements. “I have seen this illustrated again and again where parkways and boulevards have had to be cut through

⁴⁸ Frederick Law Olmsted, Jr. to H.M. O’Melveny, Letter, 30 December 1925, [Hollywood, Palos Verdes Blvd.], #8101, O.A. Papers.

⁴⁹ Bion Arnold, John Freeman, and Frederick Law Olmsted, Jr., *City Plan for Pittsburgh: Outline and Procedure* (Pittsburgh: Pittsburgh Civic Commission, 1910), 16. John Freeman was from Providence, RI, a hydraulic engineer and expert on water systems. Co-author with Arnold and Olmsted, Jr. for Pittsburgh’s city plan, Freeman’s role was to discuss how to “protect against flooding with improvements which will be affected, and finally adopted for controlling the rivers,” *City Plan for Pittsburgh*, 11-12. Of note, Freeman was also the design engineer for the Hetch Hetchy Aqueduct, Boston’s Charles River Dam, the Los Angeles Aqueduct, and advised the government on dams and locks for the Panama Canal.

such districts...The blight on it is very seldom indeed lifted by such a parkways improvement by itself.”⁵⁰

In a few instances, the Hollywood-Palos Verdes Parkway extended through more impoverished areas, such as in Gardena, where the firm proposed to build the important crossroad of Alondra Park for the north-south, west-east connection of parkways.⁵¹ Located east of Torrance, the Gardena Slough spread into open space in the low flooded area. Land directly adjacent to the slough was zoned as agriculture with the Dominguez oil fields on the knoll above the water. Proposed Gardena Valley Pleasureway branched northwest of the slough to Alondra Park which Olmsted, Jr. described as “315 acres of gently rolling agricultural land on which to develop a park of both local and regional character.”⁵² Extending from the park, the Alondra-Del Rey Pleasureway was located to go through the shortest extension of poor neighborhoods, before swerving to open space on its way to the sea. Olmsted, Jr. noted that his proposed location for the Alondra-Del Rey Pleasureway might encounter serious obstacles as Mines Field, oil wells, and other activities within the proposed boundaries could be an issue, but apparently those were less severe than a parkway through a low-grade development.

In Los Angeles, the population grew from 500,000 residents in 1920 to over 1.2 million by 1930 in a wide mix of cultures, religions, and ethnicities. While Beverly Hills and Palos Verdes were primarily white, affluent residents, the largely melting pot of East Los Angeles and the African American neighborhoods of Gardena were a blend of cultures and lower incomes. The Olmsted parkways were largely located in the more affluent areas, but

⁵⁰ Frederick Law Olmsted, Jr. to O’Melveny, Letter, 30 December 1925, [Hollywood, Palos Verdes Blvd.], #8101, O.A. Papers. Written a decade later, Olmsted, Jr. colleagues John Nolen and Henry Vincent Hubbard would come to these same conclusions as reinforced in their findings of economic improvement by parkways in *Parkways and Land Values* 11 (Cambridge: Harvard University Press, 1937).

⁵¹ The evolution of Olmsted firm approaches for parkway placement did not always factor on neighborhood class. John Charles Olmsted wrote of the Essex County parkways, “There should be no unduly exaggerated idea that the desirable restrictions [of parkways] would be exclusively or even mainly for the benefit of the rich and well-to-do. There would, unquestionably, be much of the parkway frontage that would be more available for the residences of families of relatively small incomes and in some such case there need be no prohibition of two or family houses or of single houses in solid blocks, only it would be necessary to hold them up in construction and appearance to a reasonable standard suitable for a parkway frontage.” John Charles Olmsted to The Essex County Park Commission, Report, 4 June 1915, [Essex County Park System], #2120, O.A. Papers.

⁵² Olmsted Brothers and Bartholomew, *Parks, Playgrounds, and Beaches*, 117.

sometimes the sites came through “land taking” through eminent domain, or compulsory purchase, from those who lived in less prosperous regions.⁵³ Alondra Park became a bit of a lightning rod for the African American families who were moved off their land. In June 1926, Cheney wrote confidentially to Olmsted, Jr. that O’Melveny had formed a syndicate to “buy out the negroes” and suggested Olmsted, Jr. reduce the scale of this crossroads park. “Nothing must be mentioned in this regard until it is certain that the negroes have been bought out as they have now a suit in the Federal Court claiming that the condemnation of this land was only to get them out due to prejudice against their race and not a bona fide public necessity for a park. This suit will be discussed if they are bought out.”⁵⁴ The Olmsted team needed this land; that it was of a low-class development probably contributed to support of land taking in this instance.

Lastly, social class also figured into the *use* of the parkways as they were designed predominantly for vehicles. Public space was created in the parkways, but it implied that you have a car. The parkways did not align with public transportation systems such as the Red Cars; rather, their location routed along the rivers, along cultural amenities, and along built and proposed Olmsted projects. These sites would be highlighted by a slow-paced pleasure drive, screened against sordidness and opened for natural and cultural beauty as defined by the Olmsted firm.

IMPLICATIONS, SUCCESS, AND FAILURE OF THE DESIGN

How did Frederick Law Olmsted, Jr. use infrastructure to extend ecological planning? By 1925, Olmsted, Jr. was a resident of Los Angeles and had studied the region’s ecology since 1914. His ecological research informed his understanding of both the natural environment and the local culture. He understood Los Angeles’ regional climate, geology, terrain, water, soils, microclimate, vegetation, aviary patterns, in addition to land use. He used this regional context for the design vocabulary of the parkways that was representative of Los Angeles County. Borrowing ideas from projects like the Bronx River

⁵³ A planning tool utilized by the Olmsted firm was “eminent domain,” an American word that aligns with the British term “compulsory purchase.” Lawmakers were given the authority to pay landowners the market value of their land in order to develop the site for the good of the community. Many of these land-taking projects were for community parks or easements.

⁵⁴ Charles Cheney to Frederick Law Olmsted, Jr., Letter, 26 June 1926, [Hollywood, Palos Verdes Blvd.], #8101, O.A. Papers.

Parkway, he solved an ecological problem, flooding of the major rivers in Los Angeles, *with* the design. Olmsted, Jr. understood the hydrological patterns and developed parkways that would protect and mitigate for inundation and still have constructive value during the largely dry periods.

A parkway served many functions through a single design. The road was a park. The road was a didactic urban and cultural element. The road served as a floodway and managed stormwater. The routing of the parkways connected Los Angeles, from the mountains to the sea and inland. But the parkways were also social dividers, taking land from the poor with the majority of the infrastructure improvement going through already affluent communities. The location of built infrastructure was a stark revelation of a choice to gentrify some places, and beautify neighborhoods based on social class and ethnicity. The design layout revealed a community's inherent bigotry in a given time and place and offers a lens of political ecology, that of a study in the political, economic, and social factors with regard to environmental issues.

The ambitious design of the parkway system was only partially built such as a revised parkway plan through Torrance, and none of the pleasureway parks were built along the rivers. The Mattoon Act was repealed in 1928 due to its mission's failure. Developers had misused the monies for their own profit rather than community improvement. Land acquisition was too expensive to purchase, and negotiations with private property owners for rights-of-way for the parkways also failed. The railroads and other companies argued that they had development plans in process where the parkways would have been constructed. Ultimately, Los Angeles politicians favored private property rights over eminent domain as had been the case since the city's earliest development.

Not constructing the parkways meant that the city had to mitigate for flooding in other ways. New channels for the rivers had to be built wider and deeper with flood control dams built in the San Gabriel Mountains at the top of the watershed. The 1936 Flood Control Act gave the Army Corps of Engineers sole responsibility for providing flood control of the nation's rivers and streams, and Los Angeles received the most money and attention than any other American city. Los Angeles stakeholders did not understand the need for conservation of natural resources. Blake Gumprecht adds that "proposals from the U.S. Forest Service and Soil Conservation Service for combatting flood problems by planting trees, improving fire protection and constructing minor flood control works on the

mountain streams never received adequate funding to be fully implemented.”⁵⁵ A lack of long-term vision for the city took away from what could arguably have solved many of the flooding problems without the channeling of the rivers. The construction of the parkways would have served as green infrastructure in a connected system through the county and managed urban stormwater in a picturesque design.

CHAPTER SUMMARY

The 1925 Mattoon Act provided for acquisition and improvement of landscapes within all “public ways,” including highways and parks. In response to this act, the Olmsted Brothers landscape architecture firm was hired to design a series of parkways in Los Angeles County between 1925 - 1930. From Palos Verdes Coast Road, to the Hollywood-Palos Verdes Parkway and its connector, Angeles-Mesa Parkway, this series of proposed roadways not only connected the county, but also reflected a blend of Los Angeles politics and culture at the time.

The Olmsted parkways were intended to accommodate the rapidly shifting political and cultural organization of Los Angeles. Identity and social class were imbedded in local place names, from the glitz of Hollywood, to the high-class Palos Verdes subdivision, to the racially derisive “Nigger Slough” in Gardena. Political negotiations for the siting of roads through or around derelict neighborhoods like Shanty Town on Wilshire served as reminders of social and racial division.

The function of the parkways also spoke to the era. The Olmsted Brothers’ pleasureway parks were intended for a scenic automobile drive, screening the urban and suburban surroundings, while creating local points of interest with regional character. Pleasureway parks were a commonly employed landscape type for the firm, and their proposed design in Los Angeles was at an unprecedented scale. This parkway type evolved on the East Coast to a new model in Los Angeles and the long-term success of the Bronx River Parkway supports what “could” have happened in Los Angeles.

At the same time, the Olmsted firm needed to work with a vastly different river ecology in Los Angeles, with solutions that had no previous models to guide them. These roadways could be “flood channel parkways” following natural drainage courses, capable of

⁵⁵ Blake Gumprecht, *The Los Angeles River*, 207.

adapting to the predictable cycle of flood and drought. The Olmsted Brothers' designs mediated engineering challenges of stormwater management with the economic interests of rampant land speculation, providing cohesion for both urban and suburban areas. These multipurpose parkways integrated infrastructure with numerous ecological issues to solve multiple problems with the design in a new landscape type.

CHAPTER 7

OPEN SPACE MANAGEMENT:

REPORT OF STATE PARKS SURVEY OF CALIFORNIA, 1928 - 1929

One of the most striking examples I have observed in California of the possibilities of conserving and utilizing scenic and recreational resources as a secondary but important incident of public control of land exercised primarily for other ends is in connection with the flood-plain portion of the Sacramento River and its tributaries.¹

Frederick Law Olmsted, Jr., Report of State Parks Survey of California, 1929

In 1929, the Sacramento River and its tributaries were listed as a candidate for State Park acquisition to be conserved as open space. Like the Los Angeles pleasureway park designs, Frederick Law Olmsted, Jr. valued the multifunctional and multijurisdictional control of the river for saving views, providing recreation, and preserving the flooded lowlands as natural parks. Land control was shared by a variety of governmental agencies who collectively supported these landscape amenities in open space management and through conservation. The function of open space, according to Olmsted, Jr., was to balance recreation and habitat, while showcasing the diversity of landscapes in the region. This chapter details Frederick Law Olmsted, Jr.'s environmental planning proposals for open space management policy, conservation, and environmental design guidelines, expanding

¹ Olmsted, Jr., *State Parks Survey*, 25.

his approaches on a much-larger, state-wide scale.² Through a critical examination of his 1929 *Report of State Parks Survey of California*, analysis reveals Olmsted, Jr.'s philosophical basis for these ideas, his long-range conservation goals of sustainable use of resources, and his methodology for determining landscape suitability, which preceded better-known 1960s ecological approaches.

While the initial *State Parks Survey* was published in 1929, Olmsted, Jr. remained a consultant to the state of California until 1952, five years prior to his death, and passionate about this project through all of his later life. Filed within this California job correspondence was a report entitled *Extract from F.L. Olmsted's Draft of Report on Pennsylvania's State Parks*, September 1948. Olmsted, Jr.'s writing reveals his evolved philosophical approach of the value of open space for what he termed a different type of park experience, that of "rural outdoor recreation." He wrote:

One point forcibly impressed upon me is that Pennsylvania was both widely and richly endowed by Nature with conditions of terrain—with kinds of topography, soils, waters and climate, and of vegetation and animal life consequent on these, and of resultant scenery—outstandingly suitable and attractive for a great variety of those healthful and invigorating kinds of rural outdoor recreation which in one form or another have been traditionally held in high esteem by people of this country and their ancestors before them, and which are now generally recognized as of peculiar and increasing importance to the health and well-being of civilized people living under modern conditions, especially in urban and industrial regions.³

He defined "recreation" in the broadest of terms as meaning "physical, mental and spiritual refreshment, from passive contemplation of inspiring scenery to the most active mental study of one's surroundings and the most active of physical recreations."⁴

Frederick Law Olmsted, Jr. had a long history of landscape preservation and conservation of scenic and recreational landscapes in a non-urban outdoor experience.

² While Chapter 2 denoted a difference in meaning between "ecological" and "environmental," the words "environmental design guidelines" are employed in this instance for their common and shared usage across a wide range of disciplines.

³ Olmsted, Jr., *Extract from F.L. Olmsted's Draft of Report of Pennsylvania State Parks*, 1948, 1, [California State Parks], #8072, O.A. Papers.

⁴ Olmsted, Jr. to State Park Commission, "Draft of General Statement—as a Basis for Circular No. 1," to State of California, Department of Natural Resources, 1928, 2, [California State Parks], #8072, O.A. Papers.

When President Woodrow Wilson signed into law the Organic Act of 1916, creating a federal agency called the National Park Service that would manage and conserve public landscapes, it was Olmsted, Jr. who helped craft the language for this Act:

The [National Park] Service thus established shall promote and regulate the use of the Federal areas known as national parks, monuments and reservations...which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.⁵

In California, an early 20th century preservation versus conservation debate was the flooding of the Hetch Hetchy Valley in Yosemite National Park. The devastation caused by the 1906 earthquake in San Francisco was less from building collapse than the ensuing fires from broken gas lines. To ensure future fire protection, damming the Hetch Hetchy Valley would provide a necessary water resource for San Francisco. The fierce battle between preservationists led by John Muir and the Sierra Club fought against conservationists led by Gifford Pinchot and revealed the stark differences in their approaches. Involved in this early argument for California's open spaces, Frederick Law Olmsted, Jr. wrote to Robert Underwood Johnson, advocating the valley remain in its natural state:

The United States deliberately undertook to preserve the scenery of the Yosemite National Park intact for the enjoyment of all future generations. The people of the United States are not yet so poor that they cannot afford to persevere in this purpose. To use the Hetch Hetchy as a San Francisco reservoir site would be to abandon that purpose by indirection and would establish a precedent for abandoning the purpose of any and every park in case it conflicts with any considerable utilitarian interests.⁶

Voting against Muir and his supporters, Congress passed the Raker Act in 1913 to flood the valley and build a dam. The loss of the Hetch Hetchy to a reservoir galvanized

⁵ Frederick Law Olmsted, Jr. to Frank Pierce, Acting Secretary of the Interior, Letter, 31 December 1910, Frederick Law Olmsted, 1870-1957 Papers, BANC MSS 77/792, The Bancroft Library, University of California, Berkeley.

⁶ Frederick Law Olmsted, Jr. to Robert Underwood Johnson, Letter, 18 November 1913, Robert Underwood Johnson Papers, MSi-D2 CB385 Box 4, The Bancroft Library, University of California, Berkeley.

many preservationists, but also exposed the on-going 20th century issue of natural resource management, especially with water, in a semi-arid and fire-prone ecology.

Frederick Law Olmsted, Jr.'s advocacy for open space management was another example of ecological planning. He understood the relationship and balance of conservation and utilization of natural and constructed resources from beaches and rivers, to the connection of existing trails and proposed open space. Optimal land use was discerned through comprehensive research and investigation. His ideas proposed sustainable land management techniques, especially with regard to timbering (or logging) and water use. Optimal land management, however, was not always through design, but a careful assessment of the economic use of the land, a value he impressed was not always "monetary." Conservation of land resources were intended to set aside places that people from all parts of the state could access, and would remain public in perpetuity. Planners needed to be politically empowered, Olmsted, Jr. argued such that if local stakeholders were not amenable to his recommendations, he strongly advocated use of police power, zoning, and policy to enforce conservation and preservation.⁷ Police power was a tool for planners to reduce individual development rights in deference to the benefit and safety of the larger community.

Within the *State Parks Survey*, Olmsted, Jr. laid out clear goals for open space management. Primarily, it was to preserve invaluable landscapes, such as the ancient redwood forests, which at the time were being logged for timber. Lands along the ocean had become heavily privatized as well, blocking access and views to public beaches. While preservation would save some landscapes, in other instances, conservation, he argued, could alleviate exploitation of these natural resources. In order to achieve these goals, Olmsted, Jr. wrote in his report that the first concern for California was public education on the state's resources: "The magnitude and importance, socially and economically, in

⁷ The word "police power" was consistently referenced by the Olmsted Brothers. At a 1910 conference on city planning, Olmsted, Jr. defined police power as a "principle upon which are based all building codes, tenement-house laws and other such interferences with the exercise of free individual discretion on the part of landowners, [such] that no one may be permitted so to build or otherwise conduct himself upon his own property as to cause unreasonable danger and annoyance to other people. At what point danger or annoyance becomes unreasonable is a matter of gradually shifting public opinion interpreted by the courts." Frederick Law Olmsted, Jr., *City Planning* (paper presented at the conference Second National Conference on City Planning and Congestion of Population, Rochester, New York, 1910), 288.

California, of the values arising directly and indirectly from the enjoyment of scenery and from related pleasures of non-urban outdoor life, considered in the aggregate and without regard to the means by which they are made available, are incalculably great, and in this summary are taken for granted.”⁸ Acquirement of invaluable landscapes, managed in perpetuity as non-urbanized public parks, would ideally be a mix of private and public ownership and development, as well as multijurisdictional coordination for consistent policy and use.

PURPOSE AND SCOPE OF THE REPORT

In November 1928, California voters approved a State Parks Bond Act which provided issuance of \$6,000,000 in state bonds to purchase park lands. Additional monies would come from a requirement that one half of the cost of each land acquisition would be through contributions—either for purchase or the land itself. Anticipating this vote, the State Parks Commission was granted funding in 1927 for a state-wide survey of potential state park areas with the selection of Frederick Law Olmsted, Jr. as Director for the task of land survey and assessment. The Western office of the Olmsted Brothers landscape architecture firm was still in full force working on park and parkway designs in Los Angeles, but as a private consultant, Frederick Law Olmsted, Jr. remained in high demand as arguably the pre-eminent expert on parks in the United States.⁹ This survey, Commissioners noted, presented problems of “magnitude and complexity which probably do not exist to the same degree in any other state” due to the large geographical size of California, one thousand miles of coast line, extensive mountain ranges, and a variety of climates from deserts to key specimens of large trees and forests.¹⁰ Olmsted, Jr. wrote in his report that his intent was to “determine which lands [were] suitable and desirable for

⁸ Olmsted, Jr., *State Parks Survey*, 15.

⁹ For the *State Parks Survey*, Olmsted, Jr. was hired in his name only rather than under the Olmsted Brothers. In explanation Olmsted, Jr. wrote, “Met at Mr. Colby’s office adjoining the Commission’s office...Present: Mr. Colby, Col. Wing, Mrs. Gregory, Mr. Drury, Mr. McDuffie and later Mr. Stevenot, Director of the Department of Natural Resources...They insisted that the contract should be in my name, rather than the firm name, because public announcement had been that I would act as Director of the Survey. I yielded after considerable discussion.” Frederick Law Olmsted, Jr. to Olmsted Brothers, Letter, 6 March 1928, [California State Parks], #8072, O.A. Papers.

¹⁰ Olmsted, Jr., *State Parks Survey*, 3.

the ultimate development of a comprehensive, well-balanced state park system...[but also] to define a relation of such a system to other means of conserving and utilizing the scenic and recreational resources of the State.”¹¹ His report opened with policy and environmental design recommendations, followed by discussion and listing of his final state park recommendations.

Olmsted, Jr. outlined his chief criteria for a state park system. First, the landscapes needed to be “distinctive and notable” such as the redwoods and big trees, which would attract people from all over the state to visit them. These sites would be outside of any urban or suburban communities as an alternative to more typically designed metropolitan parks. Second, the landscapes needed to be conserved through state park designation. Third, the parks needed to fulfill cultural interests that were not included in local parks, national parks and forests, or scenic highways. And lastly, the parks needed to be geographically distributed to be equitably accessible for all Californians.¹²

As early as 1925, there was interest in development of California’s state parks, particularly in southern California, as discussed in meetings with Stephen Mather, Director of the National Park Service, and a newly formed State Park Association of California. The organization intended to work with Save-the-Redwoods League, the Sierra Club, and the California Development Association to preserve Northern California stands of large trees. The significant growth of Southern California in the 1920s was such that a survey was necessary to establish outdoor recreation areas. Further, as the Los Angeles coastline was almost entirely privatized by 1925, it was considered that perhaps within the mountainous regions there could be prevention of the same kind of development to reserve these lands for public use.¹³ It was a period of state park movements, and California became one of the largest public land owners.

In June 1926, Olmsted, Jr. received a telegram at his Palos Verdes Estates office: “State Parks Association meeting last night requested wiring you whether you will serve as professional adviser on program and checking state parks survey in October and November

¹¹ Olmsted, Jr., *State Parks Survey*, 7.

¹² Olmsted, Jr., *State Parks Survey*, 49-51.

¹³ Claire S. Tappaan to Frederick Law Olmsted, Jr., Letter, 1 October 1925, [California State Parks], #8072, O.A. Papers.

with Mather and Greeley or Graves sitting with you as committee for final review.”¹⁴ The project funding would include \$18,500 with \$5,000 for Olmsted Jr.’s time. He responded that he would serve not as an advisor, but as director:

Without charge except for expenses...Would further serve as professional director of Survey for not exceeding five thousand including travelling and subsistence expenses if you and Drury would act as assistant directors under my instructions. If intelligent volunteers such as Sierra Club members can be enlisted in considerable numbers to serve under our instructions for a week or more each without pay in preliminary statewide reconnaissance eighteen thousand total should be ample otherwise not.¹⁵

State Parks Commission and Expert Volunteer Reporters

Years of engendering personal and professional relationships continued to benefit Olmsted, Jr.’s prestigious commissions. Duncan McDuffie, developer of St. Francis Wood in San Francisco and an early California residential development for the Olmsted Brothers, was chairman of the State Parks Committee and from 1923 had been chair, and later president, of Save-the-Redwoods League. In 1926, Save-the-Redwoods League was a virtual who’s who of environmental activists from a range of disciplines, and these council members would later become expert volunteer advisors for the state survey.¹⁶ McDuffie was instrumental in lobbying for the passage of bonds for state park acquisition.

McDuffie’s former business partner at Mason-McDuffie Company and childhood friend, C.C. Young, appointed five members to the State Parks Commission: William Edward Colby, Ray Lyman Wilbur, Henry O’Melveny, Frederick Russell Burnham, and Wilbur S. Chandler. In a statement written by Young he wrote that his choices for the commission were “strictly non-political, and should be composed of nature lovers as well as men of pre-eminent ability and business capacity,” noting these men would “inspire the entire

¹⁴ State Parks Association to Frederick Law Olmsted, Jr., Telegram, 5 June 1926, [California State Parks], #8072, O.A. Papers. Reference is made to Chief Forester William Greeley and H. (Hoover) S. Graves, former Chief Forester and then in the Department of Interior.

¹⁵ Frederick Law Olmsted, Jr. to Charles Cheney, Night letter, 6 June 1926, [California State Parks], #8072, O.A. Papers.

¹⁶ A short list of Save-the-Redwood League officers and their council in 1926 included president John C. Merriam, secretary Newton Drury, William Frederic Badè, William E. Colby, Henry S. Graves, Willis L. Jepson, Duncan McDuffie, Stephen Mather, Ray Lyman Wilbur, and Col. Charles Wing.

confidence of all our citizens.”¹⁷ It seems fallacious in hindsight as the commission was in fact highly political. William Colby, a San Francisco attorney, was an active officer of the Sierra Club as well as supporter of John Muir’s preservation efforts. Dr. Ray Lyman Wilbur, President of Stanford University, was one of the original councilors for the Save-the-Redwoods League from its 1918 inception. During World War I, he was Chief of the Conservation Division of the United States Food Administration and the former president of the San Francisco-based Council of Social and Health Agencies. Henry O’Melveny, the Los Angeles attorney and city promoter, had been a Los Angeles Park Commissioner since 1910, a “great lover of the out-of-doors and...particularly interested in trees and botanical matters.”¹⁸ Politician and ex-Senator Wilbur F. Chandler had been a member of the State Assembly throughout the years between 1900 and 1912, then Senator in 1914 and 1916. He was considered “particularly conversant with conditions in the interior valleys of the state, where he [had] large agricultural interests.”¹⁹ Frederick Russell Burnham of Los Angeles was the outlier, identified as an “explorer” with a recently published book, *Scouting on Two Continents*. His storied background included cowboy, guide, deputy sheriff and Chief of Scouts for the British Army. His expertise was an intimate knowledge of Southern California, particularly the mountains and desert areas.²⁰ Collectively the Commission’s task was to formulate park policy for the state along with administration of funds for park purchases.

Brothers Newton and Aubrey Drury were two more key figures for this report, and who also played major roles in the Save-the-Redwoods League. Newton was secretary of the organization in 1928, became National Park Service director in 1940, then head of California Division of Beaches and Parks in 1951. Newton served as acquisitions officer for purchase of state parks. Aubrey was an historian with his best-known book *California: An Intimate Guide*, 1935, on the history of the state. As a consultant, Aubrey wrote a 60-page

¹⁷ C.C. Young, “State Parks Commission Statement,” n.d, William Frederic Badè Papers, MS39C2 72/174c, Box 1, The Bancroft Library, University of California, Berkeley.

¹⁸ C.C. Young, “State Parks Commission Statement.” Clearly politically driven, the Olmsted Brothers produced gratis landscape plans for Henry O’Melveny in development of his estate. Olmsted, Jr. requested of his firm “write off O’Melveny job in excess of \$500, to be changed to Uncollectible Accounts (more expense run off than it is expedient to charge in view of our relations with O’Melveny),” Frederick Law Olmsted, Jr. to Olmsted Brothers, Letter, 29 September 1929, [Harry W. O’Melveny], #8222, O.A. Papers.

¹⁹ C.C. Young, “State Parks Commission Statement.”

²⁰ Ibid.

comprehensive, annotated report for possible state-wide historic sites which could be acquired and preserved as state parks: "As time passes, some of the historic landmarks in California are becoming dilapidated, and many will entirely disappear if they are not preserved by a competent authority," he wrote.²¹ His report noted further research was necessary to develop a list of archeological and ethnological areas of interest. Los Angeles County recommendations were, among others, the San Fernando Mission, Pio Pico Mansion (Pio Pico Adobe House), Dominguez Rancho, sites of former forts and battle sites, and even an historic oak in Pomona.²² These cultural landscapes, Aubrey pressed, "add to California's scenic background that 'human interest' which is so vital in attracting visitors."²³

California was divided into twelve regions, with a call for volunteers who had great familiarity with those areas to form Regional Advisory Groups. These groups would identify local organizations and individuals who would be willing to do the necessary fieldwork and collection of data for the survey. Volunteers were recruited for this civic development and tasked with: 1) suggesting specific areas of the state "believed to be preeminently suitable for consideration as parts of a state park system," and 2) develop regional reports "covering all the territory within the limits of a region...classifying the several parts of the region according to the presence or absence of each" regarding their importance as a scenic and recreational resource. The purpose of these individual reports would ensure coverage of all regional areas such that no notable area for a state park was overlooked, but also to provide a record of all the important scenic and recreational resources even if they were not chosen during the first round of acquisitions.²⁴ Olmsted, Jr.'s 180 member advisory team included a predictable list of professors and experts on subjects such as botany, geology, and history, with additional input from the Department of Natural Resources, Division of Highways, Berkeley's Forest Experimental Station, National Forest Service, and National Park Service. Many of the volunteer advisors were Olmsted, Jr.'s friends and clients, from Hugh Pomeroy of the Regional Planning Commission to clients Susan Bixby

²¹ Aubrey Newton, "Historic Sites of California," 1, [California State Parks], #8072, O.A. Papers.

²² See Newton's "Historic Sites of California" report, 49-53, for District X, Los Angeles County, n.d, [California State Parks], #8072, O.A. Papers.

²³ Newton, "Historic Sites of California," 1, [California State Parks], #8072, O.A. Papers.

²⁴ California State Parks Commission, "General Explanation: Survey of the Scenic and Recreational Resources of California in Relation to a State Park System," 20 March 1928, 1-2, [California State Parks], #8072, O.A. Papers.

Bryant and Selah Chamberlain. Perhaps surprisingly, however, was inclusion of a number of local attorneys.

Completed in only one year, the initial list of 330 park projects was whittled to 125 park recommendations, with selections from beaches, mountains, forests, and historic sites. Though there might be some shared characteristics such as natural scenery or educational value, state parks were defined differently than typical urban parks. These outdoor, non-urban parks were public lands set aside as they held state-wide interest and importance and without them “the people would otherwise be deprived.”²⁵ Some of the parks were set aside as “museum pieces” in order to preserve their notable scenery or educational, scientific or historical value. Others had a different use than an urban park, with these areas naturally adapted to activities such as camping, boating, fishing, and hiking. Ideally these parks all had special value for “inspirational and recreational value for refreshment and upbuilding of body and mind.”²⁶ In a 1929 editorial letter in *The Los Angeles Record*, the process of saving these lands relied on a “sound democratic basis” as state parks would equally be in “possession by the man of modest means as the millionaire,” unlike the state and national parks of the late 19th century which were of benefit to “only a small class.”²⁷ The sole way to set aside these parks in perpetuity was through direct action by the state, thus their specialized name.

Olmsted, Jr. initially had high expectations that the volunteers’ submitted reports would create a “dragnet” covering the entire state, that would locate all areas of important resources regardless of whether they were previously well-known and relate their current conservation status. Unfortunately, he was disappointed:

Although very valuable reports were secured from many of the reporters on questions referred to them in regard to specific localities and specific problems, especially in regard to definite projects for state parks, too few of them had the time available or the previous experience necessary for making such a systematic general survey to cover more than limited areas. The conclusions in regard to that aspect of the survey, therefore, have had to depend to a large degree upon the personal observations of the director and the small technical staff, supplemented and guided by a mass of

²⁵ State Parks Commission, “State Parks—What are They?,” Circular B, n.d., [California State Parks], #8072, O.A. Papers.

²⁶ Ibid.

²⁷ “Keep Forests Deserts and Beaches as People’s Heritage,” *The Los Angeles Record*, 4 February 1929, [California State Parks], #8072, O.A. Papers.

fragmentary comments and observations from the regional reporters and advisers, and by information obtained from technical organizations which had made systematic studies of the area.²⁸

To create a more rational and thorough evaluation of potential sites, a systematic process was developed by Olmsted, Jr. and his three staff members, men, he wrote, “trained in dealing with cognate problems”: Daniel Hull, a Los Angeles-based landscape architect formerly with the National Park Service; H.W. Shepherd, a landscape architect and professor of landscape architecture at University of California, Berkeley; and Emerson Knight, a landscape architect from San Francisco.

DETERMINING LANDSCAPE SUITABILITY AND VALUE

Frederick Law Olmsted, Jr. contended that landscape suitability was finding proper “fitness” of the landscape for both natural function and cultural use, ideally through a systematic research and planning method. He wrote in a 1926 draft of the scope of work for the state parks survey that in order to preserve the natural beauty of California, “there is needed a clear, broad understanding of what the lands are, of their approximate classification according to special characteristics adapting them to the diverse special functions..., and their approximate extent and distribution within the State.” Without preconceived ideas, Olmsted, Jr. called for the survey to be liberally inclusive such that it would provide a “rough measure” of present and past land uses, private and public ownership, and that “out of this measurement and a forecast of increasing demands” the findings could provide intelligent policy for guiding the conservation and utilization of those resources.²⁹ This measurement of quantitative and qualitative landscape characteristics, he argued, would take study and research of various methods for understanding scenic and recreational resources. The survey’s outcome therefore would be a way to “take stock of land right now to classify and protect it for the future, and make those important places a priority for the State.” Lastly, the survey would also assess the abundance and scarcity of those certain lands to protect.

²⁸ Olmsted, Jr., *State Parks Survey*, 13.

²⁹ Olmsted, Jr., “Proposed and General Scope of the ‘Survey’ in Connection with the California State Parks Movement,” 1 December 1926, 11-13, [California State Parks], #8072, O.A. Papers.

Olmsted, Jr. and his staff had divided the state of California into twelve districts, largely defined by topography and existing physical conditions.³⁰ This division precluded what Olmsted, Jr. felt might be politically-driven spheres of influence as to which landscapes would be selected. In the process of “digesting, classifying and considering this mass of projects,” Olmsted, Jr. shortened the long list by excluding those which by law were within the limits of incorporated municipalities, or were already protected as they were within national parks or forests.³¹ Recognizing the specific ecology of each landscape, they were noted as a “unit” such that an ocean beach extended from the “seaward side of low-water surf to the upper limit or crest of the wave washed material that forms the beach.”³² Charles Eliot had used a mapping system to identify best land use as early as 1894. For the state park survey, Olmsted, Jr. progressed Eliot’s analysis from field studies and maps to a quantitative rating system for which he weighed the value of each potential state park candidate. This was completed through development of a tabular chart of criteria against which to assess each of the sites (Figure 7.1 and Figure 7.2). Olmsted, Jr. felt the reports submitted by advisors had a largely subjective value, were sometimes a matter of arbitrary choice whether to treat two or more proposals as distinct and separate projects, and it concerned him that some land owners might try to be “unloading on the state” to profit on their undeveloped land.³³ His more objective rating system, therefore, for both quantitative and qualitative landscape suitability and value, came out of the need for a more systematic process for evaluation.³⁴ During October 1928, Olmsted, Jr.’s list included a large number of quantitative and qualitative criteria for which he gave a numerical value.

³⁰ Olmsted, Jr., “Draft of General Statement for Circular no. 1,” 1928, 2, [California State Parks], #8072, O.A. Papers.

³¹ In the published *State Parks Survey*, Olmsted, Jr. discussed at length his reasoning behind eliminating or consolidating projects. Some sites were excluded by law from the scope of a state park system as they were within the limits of incorporated municipalities. Some he felt were not notable enough or perhaps more locally important than state-wide. Some sites were too isolated to manage, while others less “valuable” than ones of the same type. A project was eliminated if it was less endangered at the moment or was already protected as it was within a national park or forest. Furthermore, preservation of certain species of animals should be under the responsibility of the Fish and Game Commission while state highway rights-of-way the responsibility of the Department of Public Works, Olmsted, Jr., *State Parks Survey*, 54-57.

³² Olmsted, Jr., *State Parks Survey*, 24.

³³ Olmsted, Jr., *State Parks Survey*, 54.

³⁴ Ibid. Olmsted, Jr. added that “while the opinions expressed in this [state parks] report are my own and rest on a much more comprehensive study than that of any member of the



Figure 7.1: Olmsted Brothers field notes of view and viewpoints in Cypress Point, 1934. It shows one of the ways the firm evaluated the qualitative character of a landscape. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

advisory groups, I find that my opinions are confirmed in most instances by the consensus of judgment of these advisers so far as definitely expressed."

Frederick Law Olmsted, Jr., Tabulation Sheet, 1928	
QUANTITATIVE DATA	QUALITATIVE DATA
County	
Divisions of Project	
Approximate Acreage	
Indications of Probable Cost: Estimate, Ass'D Valuation	Indications of Probable Cost: Guess
	Feasibility of Curtailment
Topography (slope) by Project type (see below)	Rating and scale of scenery
Water (lakes, reservoirs, streams) and their scale and potability	
Plant and Animal Life	Activities, both passive and active, (camping, picnics, field sports, hiking, fishing, bathing, boating, winter sports, landing fields)
Coastal Projects: Shore Conditions, Inland topography,	Character of vegetation (cultivated, grazing, chaparral, open woods, dense forest, notable undergrowth, mixed br'h (brush?) and trees)
Forest Projects: Vegetation (Redwood, Big Trees, NW mixed coniferous, semi-Sierra, semi-arid), Topography (mountain, canyon, foothill)	Scientific and educational value (historical, archeological, geologic, botanic, zoologic) ³⁵
Desert Projects: Topography (buttes, mesa, mountains, dry basin, lake)	Danger of Loss, Local inability, Gen'l support, Financial support, Income pos.
Land ownership: city limits, National, County, Local, Highway, Fish and Game (noted as categories for elimination)	

Figure 7.3: Qualitative and Quantitative data in which to evaluate landscape suitability and value

A legend for evaluating possible state parks used symbols and numbers on the tabulation sheet that showed the degree in which any specific site possessed the characteristic indicated by the heading at the top of a given column. These symbols quantified a range of values from “considerable,” “high,” to “outstandingly high” characteristics for the landscape and prefigured later practices by Ian McHarg and others to

³⁵ Note that these areas of special interest were broadly defined and included important events in which there was no longer “substantial physical reminder.” The sites needed to be protected as they were disintegrating, were vandalized architecture, or important archeology, all of which drew from the conclusions in Aubrey Drury’s report on historic California landmarks. See Olmsted, Jr., *State Parks Survey*, 52-53.

objectively determine landscape suitability (Figure 7.4). It was a prescient approach to analyzing a landscape for both its cultural and ecological value.

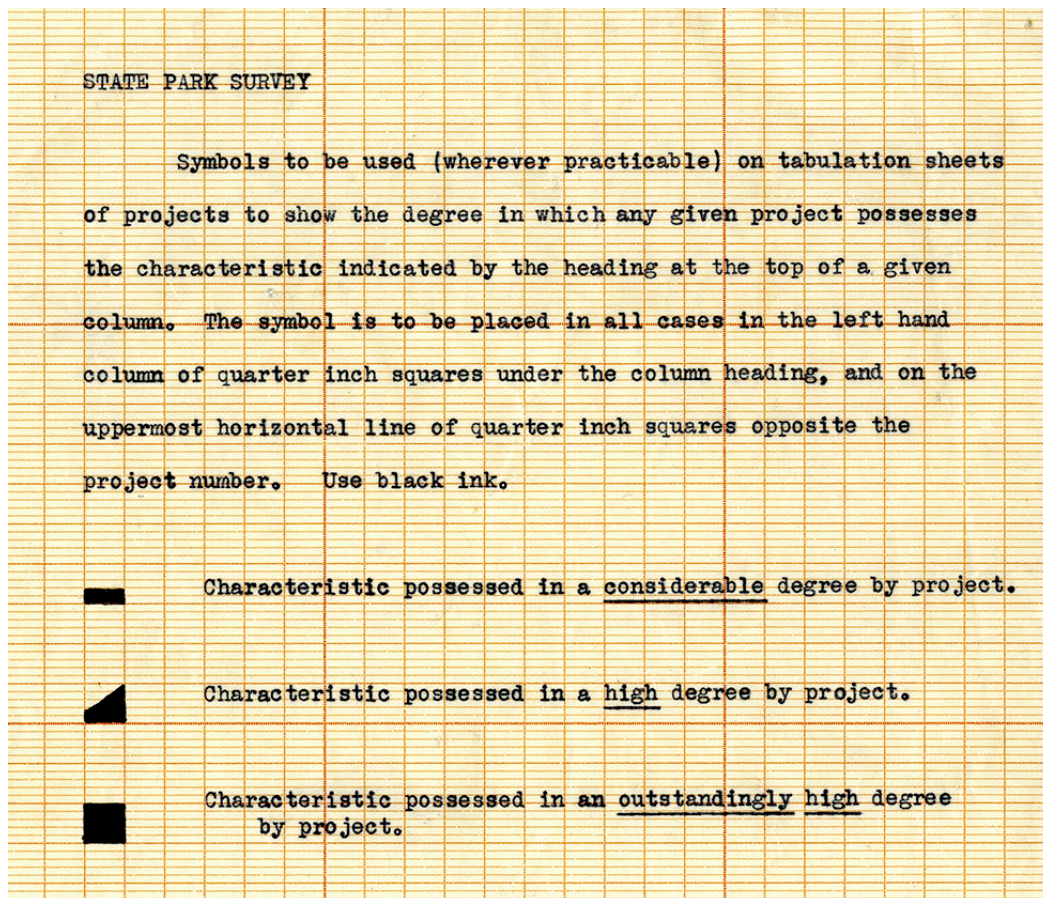


Figure 7.4: State Park Survey symbols, n.d. Symbols were placed on tabulation sheet as a way to evaluate individual projects. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

UNDERSTANDING CALIFORNIA AS A “LANDSCAPE”

Within the state parks survey, Olmsted, Jr. explained the development of his final map, labeled “Scenic Resources,” what he termed the “distribution of resources” in the state. It was a single regional map with overlays from national forests, regions by vegetation, existing state parks, main highways, and railroads (Figure 7.5). Like his landscape suitability analysis, this map, too, prefigured GIS analysis in a graphic explanation of key elements that affected state park designation. His qualitative data of “rating and scale of scenery” was linked to its physical setting. He wrote in his report that the “fundamental elements determining the characteristics of scenery are geologic: “the land forms, the soil and rocks, the water—the most significant criterion of landscape conditions which can be shown on a small scale map, in addition to streams and large bodies of water, and the distribution of the various types of natural vegetation.”³⁶ And his color-coded vegetation map anticipated phytosociology practices in ecological planning as it drew from research completed by the Forest Experiment Station at Berkeley.

From 1927 into the early 1940s, a survey was conducted by the Forest Service in which 57 elevational profiles were drawn illustrating natural vegetation in California by their plant cover at the time. This survey was an ambitious attempt to describe the complex vegetation of the state as these Vegetation Type Maps (VTM) recorded nearly 4,000,000 acres or 40% of the state. Between 1934 - 1938, University of California School of Forestry graduate Michael N. Dubrotin created graphic illustrations of the findings. Since the 1940s, vegetation has changed greatly due to fires as well as logging, urbanization, and natural succession. These profiles provide an historic record of the original patterns and relationships between dominant vegetation and their existing ecological factors such as elevation, aspect, slope, and maritime influences.³⁷ The purpose of the Forest Service survey was to serve a variety of land management objectives at the time including fire and flood control. William Critchfield explains, “Semidesert chaparral, for example, was similar in composition to ordinary chaparral, but differed in its lesser density and reduced fire hazard. Timberland chaparral was intended to segregate those chaparral areas capable of growing commercial timber. Because of these multiple objectives, the types used by the

³⁶ Olmsted, Jr., *State Parks Survey*, 39.

³⁷ William Critchfield, *Profiles of California Vegetation*, ed. Forest Service, U.S. Department of Agriculture (Berkeley: Pacific Southwest Forest & Range Experiment Station, 1971), 1.

Acknowledgment

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Compilation of map supervised by H. W. Shepherd, Division of Landscape Design, University of California, Berkeley, California.

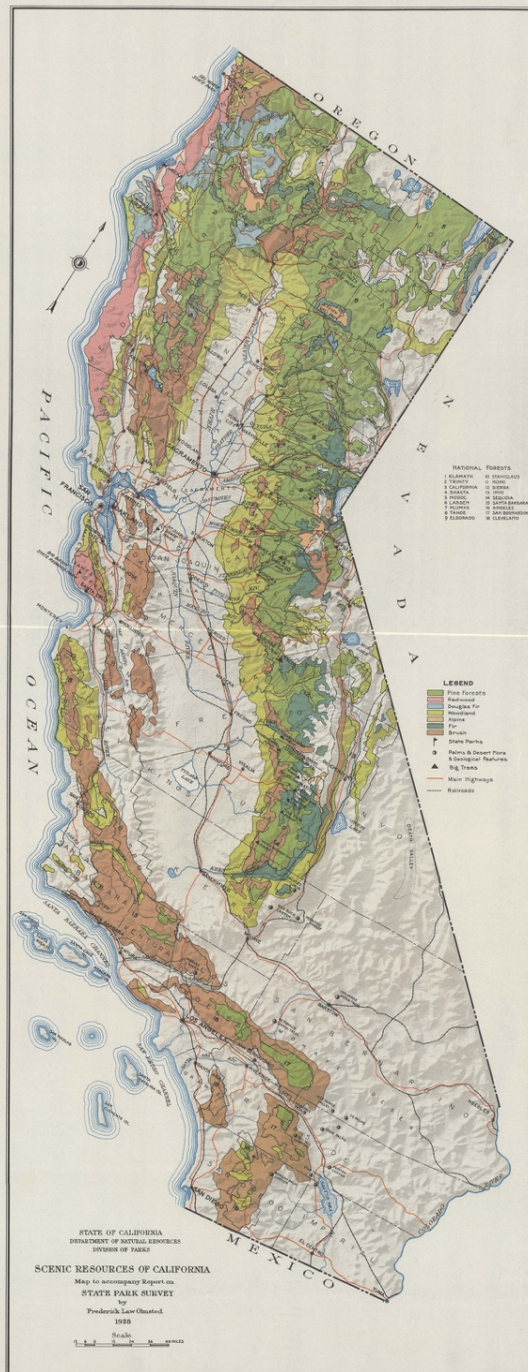


Figure 7.5: Scenic Resources of California, map to accompany State Parks Survey, 1928. Overlaid map of national forests, regions by tree type, areas of palms, desert flora and geological features, existing state parks, main highways and railroads. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

VTM survey were not widely adopted in the classification of California's vegetation," and were replaced in the late 1940s with the current usage by plant communities defined by Philip A. Munz and David D. Keck.³⁸

A review of the vegetation profiles identified by Dubrovin matched Olmsted, Jr.'s 1929 *State Park Survey* analysis of "Distribution and Character of the More Notable Resources of the State of Scenic, Recreational and Related Kinds." Redwood Forests in the survey corresponded to Type 15 of the VTM profile (Figure 7.6). Again, borrowing the research from the Forest Experiment Station, Olmsted, Jr. included the distribution of other vegetation including Big Tree Groves, Pine Forests, Douglas Fir, Fir Forests, Alpine Forests, Woodlands, Brushland and landscapes of low brush land, grazing, deserts, or agricultural use.³⁹ These landscape units, ordered mostly by tree type, were in fact defined by ecosystems. In explanation, major vegetation types or plant associations are driven by ecological factors such as topography, precipitation, aspect, and soils, with certain fauna found within these regions that rely on them for shelter and food. Understory plants also are influenced by tree types through tree litter, shade, and moisture conditions.⁴⁰ Olmsted, Jr. had not divided the state by more typical cultural and political boundaries, but rather used a scientific method of mapping the state's different ecological conditions based on plant associations.

The initial focus of the Forest Service and its Forest Experiment Station at Berkeley was on trees, range animals, wildlife, fire, and forest recreation, especially for backpacking, camping, fishing, and hunting. As late as the 1940s, Dr. V.L. Harper, Director of the Northeast Forest Experiment Station, had advocated more research on recreation in forests, but found little support from conservation organizations or watershed councils. Forest recreation was seen as a "land use and land management problem with policy and legislative overtones."⁴¹ However, Olmsted, Jr. understood the value of the Forest Service research and used the tree surveys to argue for recreational value for state parks: "Throughout all these regions of different vegetation, the quality of the scenery varies

³⁸ Critchfield, *Profiles of California Vegetation*, 4.

³⁹ See *State Parks Survey*, 39-40, which mirrors VTM maps Type 1, 11-12, 15, and 17-22 from Critchfield, 9-11.

⁴⁰ Bob Perry, *Landscape Plants for Western Regions: An Illustrated Guide to Plants for Water Conservation* (Claremont, CA: Land Design Publishing, 1992), 25.

⁴¹ Harry W. Camp, *A Historical Sketch of Recreation Research in the USDA Forest Service*, ed. Forest Service, U.S. Department of Agriculture, c. 1983), 5.

largely with the local topography. This is impossible to generalize; but the most notable scenery and the most favorable opportunities for recreation are often associated with streams, lakes, or the ocean, or with mountain, canyons, buttes, or outstanding rocks.” In the state parks survey, landscapes were further divided into categories of Sea Coast, Lake, River and Stream, Topographic Interest, and Desert Types, for conservation of scenic and recreational sites. With the work completed by the four landscapes, perhaps with their training, it is unsurprising that they understood California as a landscape with a range of ecosystems within its boundaries.

Table 2—Key to vegetation types









Type	Description and symbol	Type	Description and symbol
1	<i>Barren (Ba)</i> : Areas which are practically devoid of vegetation, including areas typed as desert (De). None	7	<i>Timberland chaparral</i> : Chaparral associations occupying areas capable of growing commercial timber trees, and including at least one dominant shrub commonly associated with timber trees. In practice, the use of this type was mostly confined to Sierra Nevada chaparral, particularly at middle and upper elevations. Same as type 6
2	<i>Grassland (Gr)</i> : Uncultivated areas with vegetation of grasses and associated low herbaceous plants. Also included here are meadows (Md) and vegetation dominated by a wide variety of non-woody plants (Eci, Emo, Hgr, Mhi, Pta, Sca, Skt, Wm). 	8	<i>Semidesert chaparral</i> : Open chaparral associations, usually bordering the desert and lacking the dense, uninterrupted cover of the chaparral type proper (type 6). Characteristic genera are the same as in type 6, plus <i>Cercocarpus</i> . 
3	<i>Cultivated or urban (Cu, Res)</i> : Cultivated or recently cultivated lands, regularly cropped natural hay lands, irrigated pastures, and residential and industrial areas.  Res Cu	9	<i>Woodland-chaparral</i> : Open stands of broad-leaved trees and Digger pine (DP) with intervening spaces occupied by shrubs of the chaparral types (5-8); includes both uniform mixtures of woodland and chaparral, and mosaics—areas of the two types too small to map.  DP B
4	<i>Sagebrush</i> : Associations of thinly branched shrubs with soft, brittle wood. Characteristic genera are <i>Artemisia</i> , <i>Salvia</i> , <i>Eriogonum</i> , and <i>Baccharis</i> . 	10	<i>Woodland-sagebrush</i> : Open stands of broad-leaved trees and Digger pine (DP) with intervening spaces occupied by species of the sagebrush type (4); includes both mixtures and mosaics, as in type 9.  A
5	<i>Chamise chaparral</i> : Chaparral associations in which chamise (At) is one of the dominant species. 		
6	<i>Chaparral</i> : Dense associations of thickly branched, hard-woody shrubs. Characteristic genera are <i>Arctostaphylos</i> , <i>Ceanothus</i> , and the shrubby species and forms of <i>Quercus</i> . 		

Table 2—Key to vegetation types. continued



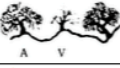

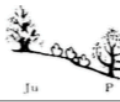

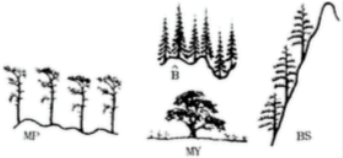

Type	Description and symbol	Type	Description and symbol
11	<i>Woodland-grass</i> : Open stands of broad-leaved trees and Digger pine (DP) with intervening spaces occupied by grasses and other low herbaceous vegetation of type 2; includes both mixtures and mosaics, as in types 9 and 10.  W DP D'	15	<i>Redwood and redwood/Douglas-fir</i> : Forests in which redwood (R) alone or redwood and Douglas-fir (D) are among the dominants.  R D
12	<i>Woodland</i> : Stands of broad-leaved trees, Digger pine (DP), or both, forming a closed or nearly closed canopy; includes riparian woodland.  A V	16	<i>Douglas-fir and Douglas-fir/fir</i> : Forests with Douglas-fir (D), or Douglas-fir and white fir (W) among the dominant species, and not including redwood (R) or pines (J, S, Y) among the dominants.  D W
13	<i>Pinyon-juniper</i> : Associations which include pinyon pine (P) or junipers (Jc, Jo, Ju) among the dominants.  Ju P	17	<i>Pine and pine/Douglas-fir</i> : Forests in which one or more of the commercially important pines (J, S, Y) are among the dominant species, with or without Douglas-fir (D).  Y B
14	<i>Miscellaneous conifers</i> : Associations in which at least one of the minor coniferous tree species (B, DY, MY, SY, TY, BP, CP, K, MP, TP, BS, and sometimes DP) is a dominant.  B DY MY SY TY BP CP K MP TP BS	18	<i>Pine/fir and pine/Douglas-fir/fir</i> : Forests in which pines (J, S, Y) and firs (R, W) are among the dominants, with or without Douglas-fir (D).  J S Y R W D

Figure 7.6: Key to Vegetation Maps (VTM), 1933-1937. The research on vegetation cover in California was used by Olmsted, Jr. to map the state by tree types. Credit: Forest Service, U.S. Department of Agriculture. William Critchfield report on "Profiles of California Vegetation," 1971

LAND CONSERVATION APPROACHES AND ETHICS

The modern use of green infrastructure planning was originally a land conservation strategy such that planning before development provided time to consider protection or restoration for numerous land uses including wildlife habitat, recreation, stormwater management, energy savings, aesthetic values, improved community health, and sustainable economies.⁴² The 1929 state parks survey was intended to follow many aspects of what today is defined as green infrastructure planning, fulfilling several of these performative qualities. Anticipating that the findings would not only determine the potential properties, Olmsted, Jr. noted that setting aside these lands in permanent conservation would require park management policy and farsighted regional planning.

The Olmsted Brothers had a long record of conservation and open space management reports.⁴³ As early as 1903-1904, Frederick Law Olmsted, Jr. was asked by Mrs. Lovell White of the Outdoor Art League of California to serve as chairman of a Massachusetts Committee to support a movement for the preservation of the Big Tree Groves of California. The Calaveras Big Tree Grove was on land that was privately owned by a logging company in Arnold, California with ancient sequoias spread out over a 2300-acre tract. Not only were the trees invaluable due to their age, but preservation of the redwoods was important to stream protection and necessary irrigation in the San Joaquin Valley. Perhaps most importantly, however, the tree species was unique, not found in any other country or state except in the Sierra Nevada range, and that warranted national protection.⁴⁴ While national protection was not extended in 1904 for political reasons, Olmsted, Jr. was able to list this site in the state park survey, and Calaveras Big Tree Grove officially became a California state park in 1931 (Figure 7.7: Calaveras Big Tree Grove, 1866). Preservation of the redwoods in California was a long-term commitment by the Olmsted firm and Frederick Law Olmsted, Jr. remained an active member of Save-the-Redwoods League throughout his life.

⁴² See Karen Firehock, *Strategic Green Infrastructure Planning: A Multi-Scale Approach* (Washington, D.C.: Island Press, 2015).

⁴³ Susan Klaus wrote of Olmsted, Jr.'s shift during the 1920s from urban plans to a focus on regional, recreational, and wilderness planning. Susan Klaus, "Efficiency. Economy, Beauty," 456-470.

⁴⁴ N.Y. Tribune, *American Architect*, 19 March 1904, [Calaveras Big Trees], #2899, O.A. Papers.



Figure 7.7: Pioneer's Cabin - near view, diameter 32 feet, Mammoth Grove, Calaveras County, 1866. Example of the scale of the Big Trees in Calaveras County, California. Credit: Public Domain, Library of Congress

OPEN SPACE MANAGEMENT AND ENVIRONMENTAL DESIGN GUIDELINES

Reservations, as classified by the Olmsted firm, were lands that were “reserved” or set aside as open space. The use of reservations by the Olmsted firm dated back to the 19th century with Olmsted, Sr.’s advocacy of preservation of Yosemite in 1865 and the 1887 restoration of the Niagara Reservation as scenic reservations. Firm principals taught that the landscape architect’s role was to allow enjoyment of the scenery without spoiling it. These reservations were initially forested or wilderness areas, however, as part of a normative practice by the Olmsted firm, reservations later included beaches and deserts.⁴⁵ The importance of reservations was that these landscapes were preserved for their scenery and ecological value, with Frederick Law Olmsted, Jr. arguing that reservation boundaries should be based on topography and other natural divisions. These open spaces also served as transitional spaces between built design where the reservation could be linked by trails.

Sustained use of resources

Part of the purpose of the survey was to develop state park policy. In doing so, open space management provided an umbrella for more detailed design guidelines. A key feature of Olmsted, Jr.’s environmental design guidelines was an approach that would allow for sustained use of resources. His focus was to negate wasting natural resources and avoid locating particular designs that were “naturally ill-adapted” to a site: in other words, planning with natural systems. Addressing this issue in an early draft, Olmsted, Jr. wrote:

Conspicuous among the existing economic uses appropriate to various parts of the many scenically notable districts are: the growing of timber; the harvesting of timber crops when done in a manner consistent with sustained maintenance of the forest and of the yield thereof in timber and in other values; grazing when conducted in a similarly conservative and self-perpetuating way; various forms of agriculture; many forms of use primarily recreational but carried on through private initiative on an economic basis, as in the case of resorts, hotels, clubs, vacation camps, and cabins for seasonable use; and, among the most

⁴⁵ Dan Marriott notes that in 1890, Charles Eliot proposed a Trustee of Public Reservations in Boston, which became the first land trust in the world. Eliot included forest reservations (Middlesex Fell, Stony Brook and Blue Hills) as well as ocean reservations (Revere Beach). Marriott, “Roads designed for Pleasure,” 278-279.

important, the gathering and conservation of water for use in areas of lesser scenic interest which are better adapted, if only assured of water, for intensive economic use for agriculture, industry, commerce and permanent residence.⁴⁶

Historic land uses within state park sites were not necessarily removed, but their method of use needed to be one that was sustaining. Logging, agriculture, and recreational activities were important elements for policy guidelines with water being a significant factor in a sustainable design.

As seen in previous case studies, water in California was always a critical component of environmental design and the *State Parks Survey* had many recommendations in this regard. With special attention to Southern California, Olmsted, Jr. was zealous about preservation and use of tidelands. Issues of land rights, acquisition, and ownership were highly complex in California law, especially with regard to water.⁴⁷ Olmsted, Jr. was particularly frustrated by private ownership of tidelands which were historically granted water rights instituted during the mid-19th century Mexican Rancho Era. The grants' lasting influence was to allow waterfront properties to be privately developed without regard to public ownership or use. Olmsted, Jr.'s impassioned plea to the State Parks Commission was to establish public ownership of the tidelands as open space and parks. Not fully appreciated at the time, it was not until 1971 that this policy became legal precedent in *Marks v. Whitney*, arguing that:

There is a growing public recognition that one of the most important public uses of the tidelands—a use encompassed within the tidelands trust—is the preservation of those lands in their natural state, so that they may serve as ecological units for scientific study, as open space, and as environments which provide food, habitat for birds and marine life, and which favorably affect the scenery and climate of the area.⁴⁸

⁴⁶ Frederick Law Olmsted, Jr., "Draft of General Statement, Circular 1," 1928, 2, [California State Parks], #8072, O.A. Papers.

⁴⁷ Frederick Law Olmsted, Jr. to William Colby, Letter, 14 June 1929, [California State Parks], #8072, O.A. Papers.

⁴⁸ Robert S. Townsend, Christopher J. Carr, William M. Sloan, & Miles J. Imwalle, *California Tidelands and Submerged Land Leasing for Conservation Purposes* (San Francisco: Morrison Foerster, 2009), 4.

For Olmsted, Jr., the ownership of tidelands confused public and private rights in addition to the use of these places.

Private development, especially in Southern California, had closed off many beaches to public access. Olmsted, Jr. wrote in his report, "The state received from the United States, in trust for the people, the entire coast of California up to the 'ordinary high water,' and still owns most of it. This is a vastly important area of publicly owned land, and administration of which intimately affects the scenic and recreational resources of the state."⁴⁹ Access to the beach was a major consideration, but so was allowing natural beach ecology. Structures along the coast edge needed to be regulated to ensure adequate setbacks. These regulations would not only keep the structures safe, but also allow the "entire natural unit of the beach...kept free to absorb the impact of storm waves and for recreational uses."⁵⁰ If these lands were made into state parks, then development could be better regulated and reduce encroachment onto the beaches.

Olmsted, Jr.'s insights in the report provided creative ways to achieve ecological planning within the constraints of California law, policy, and economics. Wavering between pragmatic ideas and passionate discourse, Olmsted, Jr. explained how to avoid exploitation and ruin of a landscape, what he believed was often a result of a developer's insensitivity to the ecological qualities and features of a site. One way to curb this misuse was to enact zoning limitations and police power for conservation purposes. For example, developers often procured only the narrow edge along a coastline for what Olmsted, Jr. deemed "often slummily urbanized" designs to the "detriment, scenic and residential values otherwise obtainable from the entire coastal belt." Rather, he argued, to "counteract these tendencies is the acquirement and management, in perpetuity, as non-urbanized public parks" which prohibited development considered naturally ill-adapted within them.⁵¹ One practical planning solution to keep the ocean view unobstructed was to require development to be located on the opposite side of the road from coastlines. The coastline then secured as a public park would also avoid political whim against future development.

The legal constraint of coastal improvement was echoed in Olmsted, Jr.'s recommendations to keep development out of riparian edges for which he advocated that flooded low lands be designed as "natural parks," left as open space, and publicly owned

⁴⁹ Olmsted, Jr., *State Parks Survey*, 18.

⁵⁰ Olmsted, Jr., *State Parks Survey*, 24.

⁵¹ Olmsted, Jr., *State Parks Survey*, 24, 43.

and regulated. Not only would parks maintain their natural hydrologic function this way, but he also recommended requirement of a “reasonable ‘front building line’ ...[that otherwise] invites danger and high construction costs, greatly reducing the total values obtained from the beach and the hinterland” while preventing encroachment onto the beach and waterways.⁵² Though he wrote it might be unconstitutional to compel new private development to allow public beach lands for street or park purposes, Olmsted, Jr. argued for police power, citing danger to properties and lives as a reasonable and far-sighted prevention against poor land use. Of the estimated \$3,000,000 in real estate acquisition, the report allocated \$2,500,000 for beaches and sea coast parks in Southern California.

Whereas Southern California state parks drew largely from sea coast regions, for Northern California, Olmsted, Jr.’s greatest concern was for the redwood forest and big trees. Reconnaissance visits to potential state park sites in part required the use of timber cruising which was a measurement of a stand of trees within the forest. In the heart of redwood country, the single most important state parks site was Bull Run Flats in which timber cruising would determine the economic value of wood in the forest. The State Parks Commission authorized thousands of dollars in expenses for this method to appraise the forest.⁵³ Indiscriminant logging needed to be balanced with wilderness preservation in some forests and environmental design guidelines for those less at risk.

Olmsted, Jr. drew some environmental guidelines from a 1928 report written by E.P. Meinecke entitled, *The Effect of Excessive Tourist Travel on the California Redwood Parks*, sent to him by L.A. Barratt, Assistant Forester from the Pacific Southwest Research Station. Largely a scientific document, many of Meinecke’s recommendations remain in place today. Campers had removed vegetation under the redwoods, and paths had been created under their canopies. Foot traffic impacted the soil and trees’ roots. For these areas to recover in root growth and groundcover, Meinecke suggested that managers not replace underplanting, but allow leaf litter or duff to become the trees’ mulch. Where the trees were especially vulnerable, camping was to be moved from the main section of Richardson Grove as well as any parking, with new well-defined paths established to keep visitors from impacting the trees. Meinecke added that he would be remiss in not

⁵² Olmsted, Jr., *State Parks Survey*, 24.

⁵³ William Colby to Frederick Law Olmsted, Jr., Letter, 21 September 1929, [California State Parks], #8072, O.A. Papers.

discussing the issue of roads through the redwoods. By 1928, highways were two to three times wider than historic roads with causal effect on the ecology of the forests.

The requirement of roads through areas of open space was both a negative impact, but also had opportunities in design, with Olmsted, Jr. writing several published essays on highway design. Attempting to weigh cultural values inherent in park acquisition with automobility, Olmsted, Jr. wrote about Californians' love of automobiles for pleasure trips and tours: "Riding for no other purpose than enjoyment of the pleasant out-of-doors through which one passes, ...is one of the 'major sports' of California." State highways through state parks were of major design import and Olmsted, Jr. offered examples of an ideal highway design in the report. The road would need to balance efficiency of travel, safeguard the scenic qualities of the road, while also anticipating future needs for road widening as it was carefully sited.⁵⁴

A drive through Angeles National Forest in Los Angeles inspired Olmsted, Jr. to write, "Notes for Laying out Roads for Pleasure Travel in Scenic Areas, Especially Forest and Mountain Areas," 1928, essentially repeating the conclusions found in both the *State Parks Survey* as well as *Parks, Playgrounds and Beaches for the Los Angeles Region*.⁵⁵ Olmsted, Jr.'s interests ranged from the construction details of roadway curves and tangents, to safety and aesthetics. Design was intended to screen other cars often with a band of trees or a park strip so that the scenery and views were highlighted. If possible, Olmsted, Jr. advocated one-way roads that reduced head-on collisions and headlight glare, but also for ecological mitigation, reduced scarring on the mountainsides with a decrease in tree and ledge removals due to their narrower width.

When the roadways were built within state parks, Olmsted, Jr. recommended the park strip be publicly owned and maintained. In fact, a legal easement should be obtained from adjacent private property owners so that they could not change the park design or its views. By the 1920s, car camping was a common way to travel such that Olmsted, Jr.

⁵⁴ The *Report for State Highways through State Parks* was so detailed in construction installation that Col. Charles Wing, Chief of the Division of Parks for the state of California, forwarded the information to Mr. Dennis, who was the Highway Maintenance Engineer for Division of Highways. "I feel sure that he would appreciate the many maintenance points you bring up and would call the attention of the various district highway foremen to the improvements possible by following your suggestions." Charles Wing to Frederick Law Olmsted, Jr, Letter, 10 August 1930, [California State Parks], #8072, O.A. Papers.

⁵⁵ See also Frederick Law Olmsted, Jr., *Highways and Landscape* (Washington, D.C.: American Planning and Civic Association, 1935).

suggested camp grounds that lined the roadway should charge fees in order to pay for their maintenance. Design of these scenic roadways, he wrote, “point in the same direction as forest fire risk, toward keeping the roads as far as practical on or near the ridges and out of canyon bottoms” and sometimes in the case of pristine wilderness, no road should be built at all.⁵⁶ Forest fires are an annual hazard in California. Not only did indiscriminant logging remove precious tree types, but Olmsted, Jr. also blamed its methods on causing forest fires. Strategic locations of new roads, therefore, could solve a dual purpose of necessary circulation to view scenery, but also access and mitigation as fire roads.⁵⁷

The equal distribution of state parks throughout the state of California ensured that all residents were within one day’s drive of a state park. Sustained use of resources, however, was impossible without public education. Olmsted, Jr. wrote the Commissioners: “The most urgent concerns of the state...are to teach the great mass of well-intentioned people how to get what they want in enjoyment of scenic and recreational values,...and how to get it without destroying the natural assets on which the continued enjoyment of such values depend.”⁵⁸ Meinecke had argued the same in his conclusions speaking specifically about the redwoods, but reflected a larger philosophical idea:

Whatever policy is adopted in the administration of the Parks, it must necessarily be influenced by the attitude the public takes towards the Redwoods themselves. To some they are objects of wonder and amazement, unique in size and age. To others they offer ideal surroundings for a pleasant outing and camping. To a

⁵⁶ Frederick Law Olmsted, Jr., “Notes on laying out roads for pleasure travel in scenic areas,” *City Planning 2* (1928): 283. An example of this principle would be in 1929 when California Institute of Technology proposed the installation of telescopes on top of recommended state park, Mt. San Jacinto, as this was the best location in the world for a 200’ reflector. Olmsted, Jr. responded, “My present notion is that if it should be selected, the proper solution of the transportation problem will be to get access to the peak or its immediate vicinity by a suspended cableway from the desert north of Palm Springs, leaving the high timbered area of the mountains still completely isolated from automobile travel, but making it very easily accessible to visitors who would use it only on foot and by horses which could be kept near the terminus of the cable-way.” Frederick Law Olmsted, Jr. to William Colby, Letter, 14 June 1929, [California State Parks], #8072, O.A. Papers.

⁵⁷ In an appendix to *Parks, Playgrounds and Beaches*, a 1924 Parks and Boulevards Committee had previously recommended that parkways and boulevards be located on the tops and ridges of mountains to “reach the most advantageous viewpoints, and as a utility they will prove extremely valuable in providing a rapid means of transportation in case of forest fires.” Frank Shearer, Superintendent of Parks, Appendix VII, 1929, *Parks, Playgrounds and Beaches*, 168.

⁵⁸ Olmsted, Jr., *State Parks Survey*, 17.

third group the rare beauty of the parks will make the strong appear. Still others will find spiritual uplift and emotion. All of these attitudes which frequently overlap, spring from cultural sources, and all of them must be recognized in any well-reasoned policy of use in the parks.

For those who wanted to carry the pleasures of city life into the country, however, Meinecke suggested they go to many of the summer resorts along the highway. For them, “they are out of place in the Parks themselves.”⁵⁹ Meinecke and Olmsted, Jr. were in perfect agreement in this regard.

The best example of environmental design and management of a state park was the lower Sacramento River and tributaries project (Figure 7.8). For more than 80 miles from Antioch to north of Marysville, California, river channels and strips of flood plain were enclosed by levees built by the state for flood protection. Lining the naturally banked levees were roads, also built and maintained by the state. Automobiles traveling atop the high levees were afforded beautiful views of the river and adjacent farmland, as the levees controlled flooding and protected the river banks from erosion. Along the course of the drive were areas for recreation, picnicking, and camping, in a design Olmsted, Jr. called a vast scale “river parkway.” A single design managed a flood problem, commercial navigation problem, an irrigation problem, with conservation and utilization of agricultural and industrial opportunities such that what seemed an unusual balance, also provided scenic and recreational amenities.

⁵⁹ E.P. Meinecke, *A Report upon The Effect of Excessive Tourist Travel on the California Redwood Parks* (Sacramento: State of California, Department of Natural Resources, Division of Parks, 1928), 12.



Figure 7.8: Sacramento River near Rio Vista, 2016. Olmsted, Jr. believed that this state park was the best example of environmental management. Credit: Total Escape, Sacramento

Reframing Economics and Politics for Ecological Planning

“Principles Governing Acquisition of Park Areas” was the title of the *State Park Survey*’s conclusion.

It is almost impossible to state succinctly and without danger of misapprehension the principles which should control the choice, and order of precedence for acquisition under the authorized bond issue...because the weight to be given to different considerations varies widely in different cases. The principle easiest to state and of most general applicability is that every dollar of the bond issue money should be used to secure the largest possible values for the state. This means, of course, that as between two or more projects of which only one can now be carried through, the cost of the land to the state, in relation to its value for park purposes, must be a controlling consideration.⁶⁰

The *cost* of a property, however, was not necessarily its *value* as Olmsted, Jr. began to reframe the economics of land acquisition. Having lived in the state for several years, Olmsted, Jr. knew that Californians valued the natural beauty of the state, its mountains, valleys, and beaches and he argued that citizens would be willing to use their economic wealth to buy and maintain these values. “How far such values *can* be bought, at any price, by succeeding generations in California will depend largely on the degree to which the physical conditions which make them possible are permanently conserved or are destroyed by the first comers through their wasteful methods of exploiting them.”⁶¹ Debate on open space was one of conservation and preservation, but it also was a social and economic decision.

Carefully weighing whether lands should be publicly or privately owned was another element of economic choices and one in which the State Parks Commission needed to find balance. Expensive infrastructure such as resorts not built simply for exploitation of resources, Olmsted, Jr. argued, should be under private ownership and not be a tax or management burden for the state. On the other hand, while California was quickly losing lands to private development in the mountains and along the sea coasts, further natural resource exploitation was occurring in mining and timbering, such that public ownership by the state could provide critical management control over non-development where

⁶⁰ Olmsted, Jr., *State Park Survey*, 70.

⁶¹ Olmsted, Jr., *State Parks Survey*, 16.

necessary. Olmsted, Jr. had witnessed how thousands of “cabin-site subdivisions” and other pleasure resorts with the sole motive of quick sale, had been sited in ways that squandered the natural advantage of the landscape. His recommendation was that making some landscapes public parks protected them in perpetuity from exploitation and ruin. Policy could be enacted with reasonable restrictions such as private development on public lands. Other times, the state could mandate policy and covenants, police power, and even eminent domain for “recalcitrant minorities” who held up projects. Preservation, he argued, was cheaper than later public improvement costs to amend inept development.

By focusing the report on landscapes, Olmsted, Jr. achieved several missions, including political ones. Instead of arguing a site’s economic merit through a cultural lens of affluence or commerce, Olmsted, Jr. focused on the intrinsic value of landscapes. In fact, Olmsted, Jr. was transparent in arguing that landscape preservation was an asset—though it may not have monetary value. “Undoubtedly the forests in California are among its most notable scenic assets,” Olmsted, Jr. wrote. “These venerable forests, made up in part by the oldest, largest and most impressive of all living things, when once cut will probably never more be seen by man...For to let trees grow so old and large is ‘uneconomic’ as a matter of timber growth.” He went on to describe the landscape in financial terms to change the discourse of value:

This generation has received, as a free inheritance from past ages, a hoard of forest wealth. Regarded as economic or exchangeable wealth, not carrying a normal rate of interest, it calls for liquidation; and it is being liquidated by lumbering operations just as fast as it can be pushed on to a somewhat glutted market. But if any of the future generations for thousands of years to come are to have opportunity of enjoying the spiritual values obtainable from such primeval forests, this generation must exercise the economic self-restraint necessary for passing on some portion of this inheritance, instead of “cashing-in” on all of it.⁶²

Perhaps it is coincidental that the appearance of objectifying the *State Park Survey* through scientific categorization of major trees reframed politics of timbering to landscape preservation and resource protection (Figure 7.9 and Figure 7.10). The report provided a platform in which Olmsted, Jr. was able to illustrate one method of ecological planning

⁶² Olmsted, Jr., *State Parks Survey*, 44.

through a legal, economic, and policy perspective, while imbuing his own values in the process, perhaps with the intent of shifting the political landscape.



Figure 7.9: Along center of Del Norte Highway near Graves Grove, 1934. View of clear cut method of logging through the redwoods. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

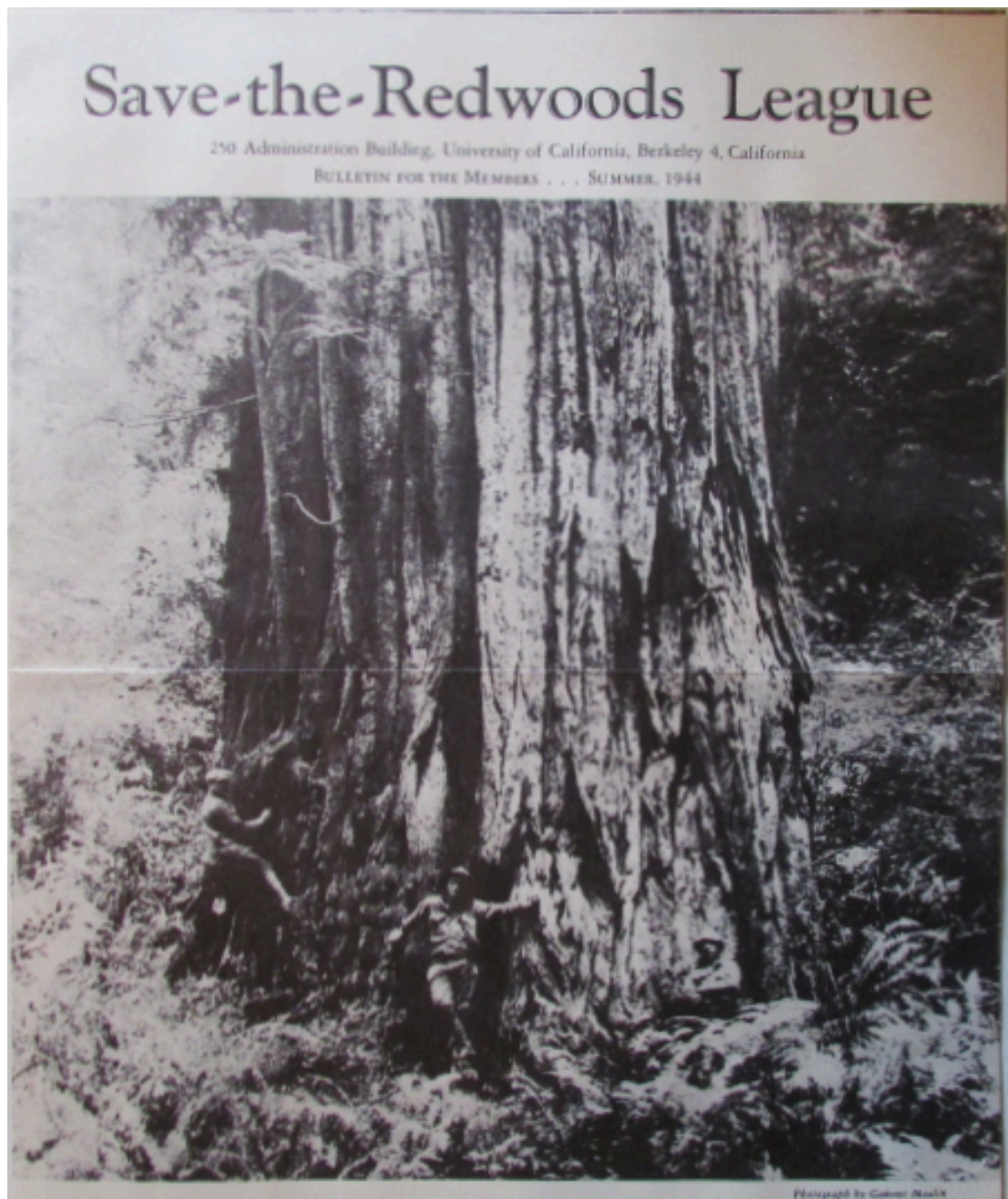


Figure 7.10: Save-the-Redwoods League cover photo, 1944. While 7.9 showed the destruction of the redwoods, this image shows the trees' preservation. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

STATE PARKS IN THE LOS ANGELES REGION

This chapter is useful in structuring Frederick Law Olmsted, Jr.'s approach to open space management policy and establishment of environmental design guidelines for both landscape preservation and conservation. Discussion of the proposed state parks—specifically within the Los Angeles region—further positions Olmsted, Jr.'s use of an ecological planning framework in his practice during the 1920s. As promised from his report, the sites in Southern California were largely sea coast projects with Los Angeles also having the addition of three historic landmarks as state parks.

Appendix No. V in *Parks, Playgrounds and Beaches* was entitled “Shore land Rights in California: An Opinion Submitted to the Citizen’s Committee in 1928 by O’Melveny, Tuller & Myers, Attorneys at Law.” It provided a brief on the legalities of tideland ownership. The law firm cited an exhaustive list of legal opinions on shore land, tideland, and riparian rights from cases regarding public versus private ownership throughout California with findings that “the public owns all tidelands and submerged lands, and has an unquestionable right to use that part of *all* beaches lying below mean high tide.”⁶³ In order for regional beach reservations to remain in public hands, Olmsted, Jr. argued that there needed to be “frequent and adequate access to the beach from the landward side.” A state park that included wide boundaries of conserved open space—the beach, mesa and hills—would satisfy those terms and allow the state to maintain control over development (Figure 7.11).



Figure 7.11: Aerial view of Santa Monica homes along Pacific Coast Highway, looking south, c. 1930. Image shows how houses had completely cut off any beach access. Credit: University of Southern California Libraries and California Historical Society. Digitally reproduced by the USC Digital Library; From the California Historical Society Collection at the University of Southern California

⁶³ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 9.

Before 1929, California already had two sea coast parks in acquisition as state parks: Santa Monica State Park and Manhattan Beach State Park. The *State Parks Survey* added Malibu Coast Park as the rare example of a Los Angeles sea coast project that fit within the legal constraints of a state park. Olmsted, Jr. annotated a description of this park in his report as “A series of beaches, with bluffs and mesa, alternating with valley mouths, backed by the Santa Monica Mountains and traversed by the new state highway along the coast, extending eastward from the Ventura County line.”⁶⁴ In the course of developing the separate project of the Los Angeles park and parkway system during the same year, Olmsted, Jr. hand-drew the location of proposed parks and parkways on USGS maps. Because some of the projects were at a reservation scale, he moved from a more detailed scale of 1:24000 to 1:62500 to capture the breadth of this landscape. The outline for Malibu Coast Park was partially represented in Plate 49 of *Parks, Playgrounds and Beaches* and captioned as “Airplane view of Dume Canyon and Dume Point, showing in dash the Rancho line and in solid line the areas including the beach, the mesa near the shore, the hill slopes and the peak suited for development of a fine Oceanside park, and showing United States land in Ramirez Canyon that should be included.”⁶⁵ This image was also shown in detail in Olmsted, Jr.’s annotated maps entitled N-1 and N-2, 1:62500 (Figure 7.12 and Figure 7.13).

Olmsted, Jr. located a series of sites which made up the vast Malibu Coast Park. Writing of them in *Parks, Playgrounds and Beaches* he proposed, “Dume Park, back of Zuma Beach has been included also in the park plan, as one of the most valuable, healthful and attractive features for that part of the general plan, and is also intimately connected with the beach problem. This area with those to the west of it certainly should be considered in the plan for State Parks as well.” Olmsted, Jr. recommended extending Malibu Beach Park into Ramirez Canyon Reservation to be used as public recreation of Dume Park as 464 acres was already under ownership by the government.⁶⁶ In connection with Olmsted, Jr.’s design guidelines for public open space, he described the way future development should occur along the beach front. “Where the highway is near the shore, few if any buildings should be permitted to interfere with the enjoyment of this route.”⁶⁷ He also sought a wide

⁶⁴ Olmsted, Jr., *State Park Survey*, 58.

⁶⁵ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 104.

⁶⁶ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 70.

⁶⁷ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 103.

right-of-way acquisition next to the road for possible future expansion, as wide as 200 feet, as it would “protect public traffic and pleasure needs for all time.”⁶⁸



Figure 7.12: Airplane view of Dume Canyon and Dume Point, Parks, Playgrounds and Beaches for the Los Angeles Region,” Plate 49, 1930. Outline for Malibu Coast Park. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site



Figure 7.13: Cropped view of USGS map entitled N-1, 1929. This annotated map by Frederick Law Olmsted, Jr. shows parks numbered 2-5 that capture Malibu Coast state park for the Los Angeles park and parkway proposal. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

⁶⁸ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 103.

Dume Canyon Park had three miles of beaches and was far enough from an urban park to be a beach reservation. At the time Olmsted, Jr. noted its “beautiful trees, canyons, and gentle slopes, where park and recreation features in great variety can be developed; and back of this mesa the hills rise to prominent points offering reasonable opportunity for hill climbing and more vigorous exercises, with fine scenery.”⁶⁹ While Olmsted, Jr. expected some necessary development for public use in Dume Canyon Park, in the steep elevations above it in Dume Canyon Parkways and Cliffs, it was recommended the canyon and hill cliffs be preserved and left undeveloped. The boundaries for this reservation were to follow existing ridge lines and protect views for any proposed roads. These sites would maintain public access in what he believed was a sustained use of the landscape (Figure 7.14).



Figure 7.14: Point Dume National Reserve and State Beach, Malibu, Los Angeles County, 2017. One of the state parks proposed for land acquisition by Frederick Law Olmsted, Jr. Credit: Christine Edstrom O'Hara

⁶⁹ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 105.

Olmsted, Jr. culled over 200 projects from his list of 330 original sites due to a variety of issues. The published *State Parks Survey* lists only 125 sites, but a review of his draft document provides insightful information regarding the Los Angeles projects that were eliminated. Some projects were deemed too costly such as the Playa del Rey marshes. Another expensive site was along the western edge of the Rindge Ranch in Malibu which he recommended could become a coastland regional public area for recreation. As the ranch doubly qualified under a state highway rights project for construction of Roosevelt Highway, later to be renamed Pacific Coast Highway, it should be purchased through highway funds.

However, some disqualified projects from the final state park list were later incorporated into his master plan for Los Angeles in *Parks, Playgrounds and Beaches*, allowing Olmsted, Jr. to imbed these landscapes into another project proposal. It was a clever way of circumventing the legalities of state parks law with projects that Olmsted, Jr. still felt should be protected as open space. Perhaps to keep his intentions veiled, Olmsted, Jr. mentioned the *State Park Survey* only twice in passing in the latter report.⁷⁰ Two projects omitted due to the legal restriction of their location within Los Angeles' municipal boundaries and considered a class of metropolitan urban park were Los Angeles River Park and Redondo Beach. Added in *Parks, Playgrounds and Beaches*, Los Angeles River Parkway was proposed as a pleasureway park in which the wide easement would protect the river and its banks. For Redondo Beach, it was recommended to purchase a mile and a half of beach and bluff, extending to the existing Esplanade. In this way, the beach would remain public with the natural features preserved.

The omitted "Santa Monica Mountains" were discussed in detail in *Parks, Playgrounds and Beaches* as the Mountain Chains Park.⁷¹ Possibly with limited funding for state park acquisition, an aggregation of recommended state and municipal park reservations within the mountain range would allow Olmsted, Jr. to select the best locations without the expense of the entire mountain range. His recommendation of three smaller parcels later became state parks: Point Dume State Reserve (1958), Topanga State

⁷⁰ See *Parks, Playgrounds and Beaches*, 87, regarding incorporation of recreational areas of San Bernardino and San Jacinto Mountains as an extension of the Los Angeles States Parks. The *State Parks Survey* is also mentioned again noting the routing of a parkway near Pio Pico Adobe House, "owned by the state, that should be included within the parkway reservation," 125.

⁷¹ See Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 97-98.

Park (1967), and Malibu Creek State Park (1974). Along with Point Magu State Park, north of Malibu in Ventura County, these reserves were linked in 1978 into one public open space called the Santa Monica Mountains National Recreation Area and at 240 square miles, is the largest urban park in America.

By 1929, the State Parks Commission began purchase of properties based on Olmsted, Jr.'s recommendations and acquired state parks from a variety of landscape types throughout the state of California and by 1959, the California state park system encompassed 150 beaches, parks, and historic monuments of over 615,000 acres (Figure 7.15).⁷² Olmsted, Jr.'s work began a long process of land acquisition and conservation in the urban fringe of Los Angeles County, but created a legacy of vast open space reservations in metropolitan Los Angeles.⁷³

CRITIQUE AND CONCLUSIONS TO THE *STATE PARKS SURVEY*

The 1929 publication of the *State Parks Survey* was only the beginning of Olmsted, Jr.'s advice on state parks, a consulting position he maintained with the California State Park Commission until 1952. Recognizing the immensity of work, a 1950 California State Parks and Historical Monuments map reflected his recommendations from reports in 1928 and 1945-50 and was a graphic illustration of nearly 25 years of work on behalf of landscape conservation for the state of California (Figure 7.16). The guiding environmental design policy maintained today reflects an early awareness of the value of inclusion of open space management in ecological planning and design. While prescient in many ways, Olmsted, Jr.'s proposals, however, were not without critique.

⁷² For a historical listing of State Park acquisition see California State Parks Planning Division, *Planning Milestones For the Park Units and Major Properties Associated with the California State Parks System*, (Sacramento: California State Parks Planning Division, 2013).

⁷³ In 1931, Olmsted, Jr. was siting a roadway along Coast Highway and adjacent lands through the Rindge Ranch in Malibu. Perhaps as a way of guaranteeing project construction, routing between still unbuilt parks proposed in *Parks, Playgrounds and Beaches* and *State Parks Survey*, Olmsted, Jr. once again proposed the same roadway in another development. The proposal was to move the road away from the beach edge to avoid blocking the ocean view and ensure drainage basins were not disturbed. See Olmsted Brothers to Marblehead Land Company, "Report on Malibu Roads and Property," 16 January 1932, 1- 12, [Malibu Park], #8260, O.A. Papers. Olmsted, Jr.'s friend Walter Leimert was the selling agent for Marblehead Land Company.

The equitable distribution of park projects was intended to allow for one day's drive from anywhere in the state; however, you needed a car to get there. Parkway designs were continually advocated in all of Olmsted, Jr.'s reports for their value of bringing the driving public closer to natural settings. A continued infatuation and prominence of the automobile is a clear dichotomy for contemporary environmental planning, and pleasure parkways imbedded through open space are a bane to many conservation planners today. Others involved in wilderness planning in the 1920s, such as Benton MacKaye, believed the car was the antithesis of the wilderness experience. His Appalachian Trail Project was a strictly pedestrian experience where development was curtailed and the natural experience was in opposition to the urban one. MacKaye's Wilderness Club critiqued landscape architecture for making outdoor recreation commercialized recreation.⁷⁴ Nevertheless, one must still drive to the trail head of the Appalachian Trail in order to begin this experience.

⁷⁴ See Paul Sutter, *Driven Wild: How the Fight against Automobiles Launched the Modern Wilderness Movement* (Seattle: University of Washington Press, 2002).

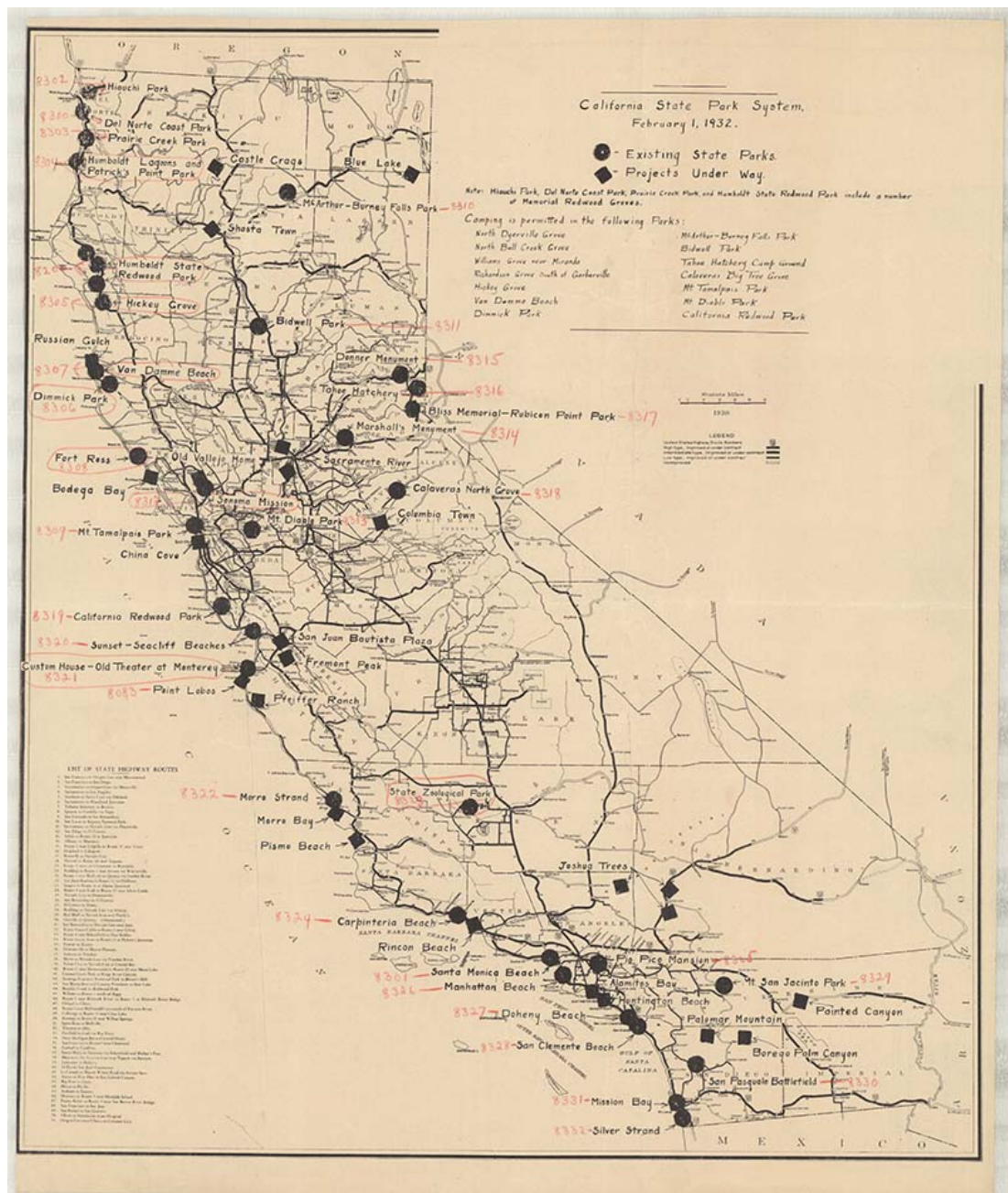


Figure 7.15: California State Park System, 1932. Squares represent state parks acquired and diamonds are those underway for acquisition. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

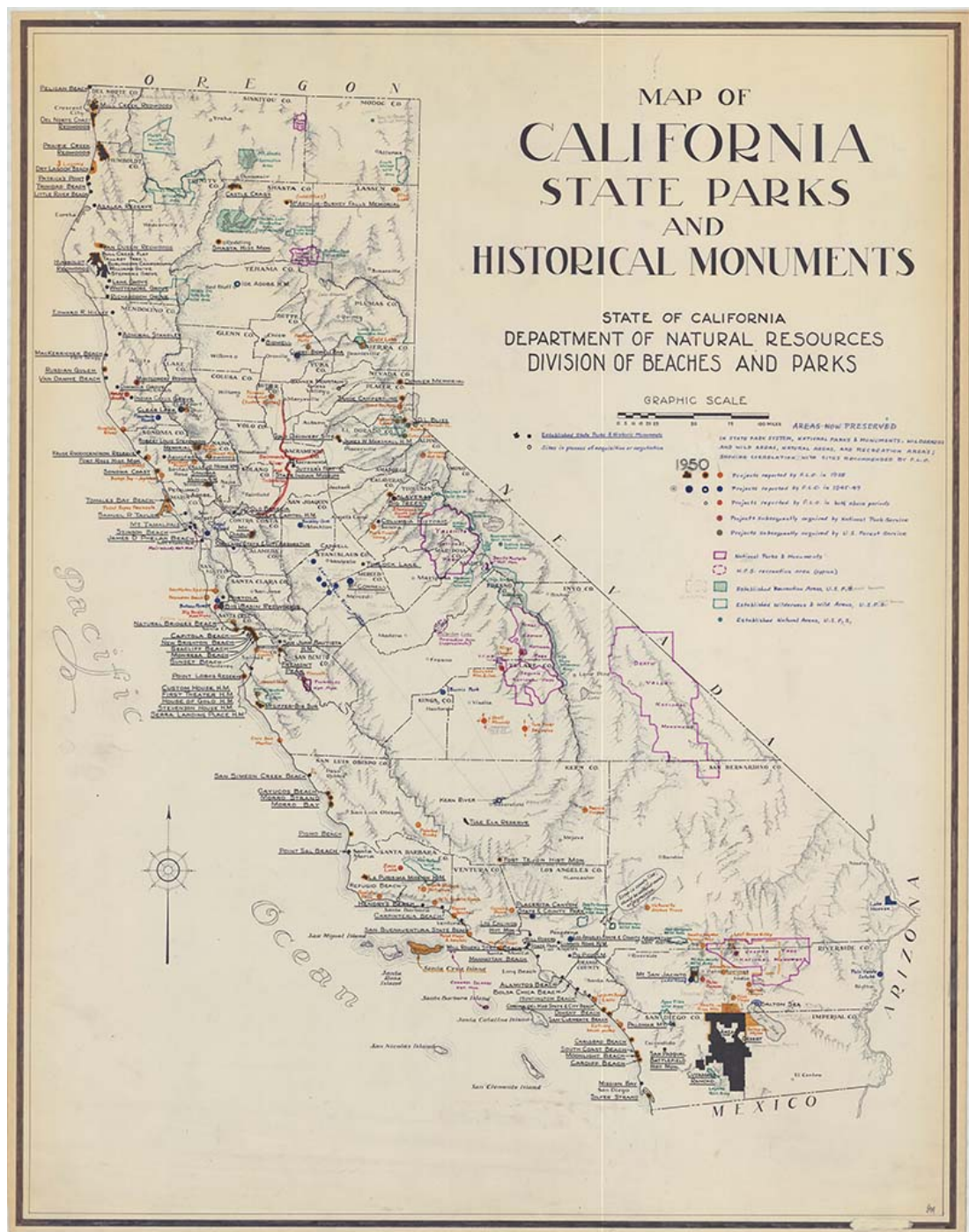


Figure 7.16: California State Parks and Historical Monuments map, 1951. Graphic illustration of 20 years of acquisition as addendum to 1951 report. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

The commercialization of recreation was of equal issue with the politicization of conservation. Newton Drury worried as early as 1930 that rather than the State Parks Commission choosing potential state park sites, that local communities were influencing decisions. While this may seem appropriate as locals would perhaps best discern which sites should be conserved, monies for a state-wide acquisition needed to be carefully spent on truly special projects, not simply regional ones. Timber interests also wanted to be part of the discussion, concerned that their livelihood would be impacted. Perhaps they were right in that the anti-timbering lobby of Save-the Redwoods appeared to unduly influence the conservation of redwood and big trees over all other landscape types. Writing under the Mason-McDuffie letterhead, Duncan McDuffie noted that Olmsted, Jr. was paid to review the redwoods' site in 1927: "Referring to our recent exchange of telegrams, the Save-the-Redwoods League desires to engage you to make an examination of and report upon the Bull Creek-Dyerville redwood area. The fee mentioned in your telegram is satisfactory to the League. It is highly desirable that the work be done this fall...[Newton] Drury will get together maps and other data, which will be ready for you when you arrive in San Francisco."⁷⁵ McDuffie lobbied for a bond referendum to pay for state parks, then served as chairman of the State Parks Commission, and pressured the acquisition of his conservation agenda. Stephanie Pincetl writes in *Transforming California: A Political History of Land Use and Development* that Save-the-Redwoods League was deeply involved in Progressivist reform at the state level in moving power into public versus administrative power, with many decisions based on "scientific politics." Save-the-Redwoods, supported by the Sierra Club and Sempervirens Club, led to major state park acquisition including Humboldt Redwoods State Park, Prairie Creek Redwoods State Park, Jedediah Smith Redwoods State Park, and Del Norte Coast Redwoods.⁷⁶ The State Parks Commission

⁷⁵ Duncan McDuffie to Frederick Law Olmsted, Jr., Letter, 21 September 1927, [Master Plan for Redwoods], #8335, O.A. Papers. McDuffie's lobbying is also seen in a confidential letter from the previous year, "I acknowledge receipt of your letter of November 26 [1926] with which was enclosed your recommendations in reference to the California park situation. We are in entire accord with these recommendations except in one particular. The suggestion contained in your final paragraph that 'no general and extensive program of new park acquirement should be entered on' will perhaps conflict with the program of the Save-the Redwoods League." Duncan McDuffie to Frederick Law Olmsted, Jr., Letter, 1 December 1926, [Master Plan for Redwoods], #8335, O.A. Papers.

⁷⁶ Stephanie Pincetl, *Transforming California: A Political History of Land Use and Development* (Baltimore: Johns Hopkins Press, 1999), 44-46. See also Susan Schrepfer, *The*

heavily invested in Northern California redwood acquisition and it is difficult to believe it wasn't without political pressure to do so.

Water rights in the American West in the early 20th century were—and still are today—a tenacious web of power players, marked by the 52 cases of tidelands ownership under state lawsuits. In a U.S. Supreme Court decision in 1947, *United States v. California*, the Court held that California did not own tidelands rights after all, as they were in fact owned by the Federal government: "California is not the owner of the three-mile marginal belt along its coast and that the Federal Government rather than the state has paramount rights in and over that belt, an incident to which is full dominion over the resources of the soil under that water area, including oil." California had used the royalties from tideland leases to oil companies and fisheries, tapping 70% of the income to fund state parks and recreational area acquisition.⁷⁷ In a 1952 report on state parks, Olmsted, Jr. wrote to the Division of Beaches and Parks, Department of Natural Resources, that a five-year program involving over \$60,000,000 to round out and develop the California State Parks System would be aided by tideland oil royalty funds. Apparently, offshore drilling was a tradeoff for funding natural resource management and it subsidized Olmsted, Jr.'s plans for beach acquisition in accordance with the state's master plan for shoreline development.

The *State Parks Survey*, however, has had more benefits than weaknesses. The current California State Parks mission reads, "To provide for the health, inspiration and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high quality outdoor recreation." The 1929 report was a key open space plan that influenced the mission and values of modern environmental policy and management. For Frederick Law Olmsted, Jr. this successful plan not only conserved lands in perpetuity, but for him, the value of state parks was even greater for their psychic and mental health value. Referring to one of his favorite state parks, Point Lobos in Monterey County, Olmsted, Jr. poetically wrote about it in "A Landscape of Beauty and Meaning." He

Fight to Save the Redwoods: A History of Environmental Reform, 1917-1978 (Madison: University of Wisconsin Press, 1983).

⁷⁷ The original intention of this legal action was initiated by Secretary of Interior Harold L. Ickes who questioned the legality of state versus federal ownership with regard to prospecting permits under the Federal Leasing Act of 1920. The filing of *United States v. California* was a test case before the courts. See Ernest Bartley, "The Tidelands Oil Controversy," *The Western Political Quarterly* 2, no. 1 (1949): 135-153.

summarized the balance of landscape scenery with ecological planning as one could observe “nature as a dynamic living organism.” Here in preserved open space, one could combat the weariness and relief from contemporary urban life in contemplation of a sublime natural setting.

Palos Verdes, the Los Angeles parkways projects, and the *State Parks Survey* were all being developed at the same time, including one more large-scale plan for Los Angeles, *Parks, Playgrounds and Beaches for the Los Angeles Region* published in 1930. Collectively the weight of work and the political maneuvering in these projects caused Frederick Law Olmsted, Jr. a nervous breakdown in 1929.⁷⁸ Perhaps the duplication of language and crossover of projects between reports during this year is a reflection of a man out of time with his ambitious ideals for California.

CHAPTER SUMMARY

The 1929 *Report of the State Park Survey of California* was a plan for a comprehensive, well-balanced state park system, showcasing a range of landscape types from sea coast, forest, mountain, and desert areas. In contrast to designs of urban parks, state parks were outside of urban and suburban settings, defined broadly as a non-urban outdoor experience of distinctive and notable landscapes. Within this document, Olmsted, Jr. challenged issues of private and public management of natural resources. While not negating their practice, such as timbering, he limited those activities when they wasted natural resources. Logging, for example, should be responsibly executed without removal of exceptional tree types like the ancient redwoods. Building alongside water resources required setbacks to preserve and allow for natural hydrologic function in streams, river and beaches. Automobility tested how to create circulation through state parks, while maintaining their natural beauty, minimizing environmental damage, and carefully siting

⁷⁸ William Colby to Olmsted Brothers, Letter, 21 September 1929, [California State Parks], #8072, O.A. Papers. This letter explains why W.H. Shepherd was brought in to help Olmsted, Jr. complete the state parks survey. Colby quotes an April 24th letter from Olmsted, Jr. (to Drury) writing, “In order to get myself back into condition I must, I fear, pretty soon stop my present rather futile efforts to keep my head above water with these things and other jobs and take a long rest, and the best chance I see for doing so with the least injury to the State Park business is to dump the responsibility for untangling my loose ends on you because I have no one in my own office who is both familiar enough with that problems as a whole and otherwise equipped to follow through.”

private development and amenities within them. Recreation therefore was a balance of public access and landscape conservation, while also anticipating design for future land use.

A close reading of the report establishes a framework for understanding Frederick Law Olmsted Jr.'s ecological planning proposals in open space management policy, conservation, and environmental design guidelines, and expands his work to a state-wide scale, while weaving his decisions through a study of cultural context and politics of the era. Examined through a 21st century lens, Olmsted Jr.'s long-range conservation goals of sustained use of resources, preservation of fragile ecosystems, and methodology for evaluating landscapes for both their quantitative and qualitative characteristics, reveal a nascent but sophisticated approach in landscape architecture practice.

CHAPTER 8

WATERSHED PLAN:

PARKS, PLAYGROUNDS AND BEACHES FOR THE LOS ANGELES REGION, 1929 - 1930

An adequate park and recreation system should recognize two distinct types of functions in order to meet needs that are primarily local and those that are regional...Many park areas, primarily intended for the one purpose, may serve the other, or may serve both, and thus make for efficiency and for economy. Indeed, many a local recreation area such as a public city beach, created and operated by a single city primarily for its own people, is now effectively serving as a regional area drawing people from all parts of the region in even greater numbers than are other areas intended strictly for regional use.

The total area of this proposed regional system of parkways and large parks, including 16,000 acres of existing publicly owned parks, water lands, and similar areas is approximately 70,000 acres, and the aggregate length of the proposed routes is 440 miles. Seventy thousand acres is a large amount of park land, but, looking to the future of this extraordinary region, it seems entirely reasonable.¹

Frederick Law Olmsted, Jr., Parks, Playgrounds and Beaches, 1930s

As previously discussed, *Parks, Playgrounds and Beaches for the Los Angeles Region* was published in 1930, a collaboration between the Olmsted Brothers and planning firm,

¹ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 35, 95.

Bartholomew and Associates. Through extensive field study and research, the proposal provided a detailed report for the creation and financing of a regional park system. Based on a careful reading of the report, one can discern which firm developed the various components of the report, with the written report chiefly the work of Frederick Law Olmsted, Jr. Spread over 70,000 acres, the design encompassed a watershed scale of ecological planning and was the largest project undertaken by the firm in the Los Angeles area. *Parks, Playgrounds and Beaches* has been recently studied by many scholars, mostly through the lens of politics and culture.² This final case study, however, uses the report to analyze the way Frederick Law Olmsted, Jr. employed ecological planning at a watershed scale, organized around Los Angeles' natural resources in an early awareness of, what today would be called, watershed management.

This chapter culminates Frederick Law Olmsted, Jr.'s understanding of the Los Angeles basin, reflected in a progressively scalar range from community design at Palos Verdes, the infrastructure work on the parkways, open space management proposals from the *State Parks Survey*, to a park system arranged around five watersheds in Los Angeles. Though at a massive scale of ultimately 1500 square miles, the proposal provides extraordinarily detailed study of the region, and at 178 pages, the report was significantly longer than most proposals by the firm during this period. Design features and elements within this proposal have been discussed in previous chapters, but this chapter will review the plan holistically at a wide angle. As this chapter will demonstrate, the report revealed how the Los Angeles park and parkway proposal combined the Olmsted Brothers' work from 1903 - 1930 into a broad regional understanding of the range of ecosystems, the behavior of the watershed, and their design response to these ecological conditions. Its proposal was a culmination of previous designs, and an aggregation of professional work into one project (Figure 8.1).³

² Hise and Deverell, *Eden by Design*, 2000; Greg Hise and William Deverell, "The Afterlife of a Master Plan." In *Planning Los Angeles*, ed. David C. Sloane (Chicago and Washington, D.C.: American Planning Association Planners Press, 2012): 204-211; Hise and Deverell, "The 'Art Political,'" 2001; Schaffer, "Scenery as an Asset," 2001; Young, "Moral order," 2001; Mike Davis, *Ecology of Fear*, 1998; Jeremiah B.C. Axelrod, *Inventing Autopia: Dreams and Visions of the Modern Metropolis in Jazz Age Los Angeles* (Berkeley: University of California Press, 2009), Richard Longstreth, *City Center to Regional Mall: Architecture, the Automobile and Retailing in Los Angeles, 1920-1950* (Cambridge: MIT Press, 1998).

³ Note the Olmsted firm locates letters for this report in numerous O.A. Papers. Job files included [Palos Verdes], #5950, [California State Parks], #8072, [Los Angeles County, General], #8100, [Hollywood, Palos Verdes Blvd.], #8101, [Angeles-Mesa Parkway], #8102,



Figure 8.1: Master Plan from Parks, Playgrounds and Beaches for the Los Angeles Region, 1930. Green areas represent a connected system of parks, parkways and with an extension in red to reservations outside Los Angeles County such as the islands of Catalina and San Clemente. Credit: Parks, Playgrounds and Beaches for the Los Angeles Region. Huntington Library, San Marino, California. Digital image by Christine Edstrom O'Hara

[Los Angeles City and County Parkways], #8103, with #8102 and #8103 containing unpublished drafts of the report.

NEEDS FOR A COMPREHENSIVE PARK PLAN IN LOS ANGELES

The Progressive Era was a period in which the public had an opportunity to work more directly in the political process as citizen members of political committees and these committees were often comprised of local stakeholders rather than political appointments. Deverell and Hise write that a Los Angeles Citizens' Committee was formed in June 1927 and of the 100 members, many were drawn from the film community as well as commercial, industrial, and real estate professions. The minor qualification was that participants were willing to spend at least \$500 to join the committee, a small fee for the immense power they would command over Los Angeles County's future urban design.⁴ As in previous projects during the 1920s, listed among the Citizens' Committee were Olmsted, Jr.'s clients and professional associates such as developers Walter Leimert and Frank Vanderlip, Palos Verdes connections Jay Lawyer and architects David Allison and Myron Hunt, Torrance and Hollywood-Palos Verdes Parkway engineer J.R. Lippincott, and the committee's Executive Secretary Hugh Pomeroy. Another Olmsted, Jr. champion, the law firm of O'Melveny, Tuller & Myers provided the report's legal services without charge. As explored in this chapter, the ultimate failure of the proposal was that the shared environmental agenda of Olmsted, Jr. and his supporters was not unanimously embraced by the entire committee who lacked foresight on the long-term merit of the design.

The Citizens' Committee was tasked with three items: make a survey of existing publically owned parks, playgrounds and beaches in Los Angeles County, prepare a report for how to augment these facilities, and provide recommendations for how to carry them out. As consultants, the Olmsted Brothers and Bartholomew and Associates compared Los Angeles against other American cities and their park spaces as explained in facts, statistics, and maps, concluding that Los Angeles was significantly behind in this matter. Expediency was urged to acquire still undeveloped open space necessary for building the park system. Additional recommendations included creating a park board with power and responsibility for land acquisition and park construction, and introducing a tax assessment averaging 10 cents on every "\$100 of assessed valuation"—which was noted as the equivalent of "the cost of operating each pleasure automobile in the County approximately eight miles per month."⁵

⁴ Hise and Deverell, *Eden by Design*, 37.

⁵ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, xiv.

The Los Angeles region was a conglomeration of forty cities in addition to the city of Los Angeles. This intensive growth, largely incurred during the 1920s, did not have a methodological master plan and Olmsted, Jr. and Bartholomew argued that without one, the region was destined to strangle itself by development. A comprehensive city plan had been a 20-year goal for civic leaders. While working on the Hollywood-Palos Parkway in 1926, Olmsted, Jr. had argued for a comprehensive plan including a park system. The following year, Olmsted Brothers associate George Gibbs wrote Olmsted, Jr. that he had spoken with Hugh Pomeroy at a Torrance Chamber of Commerce meeting, and that as Secretary and General Manager of the General Committee on Parks there should be sufficient funding for a Los Angeles parks report.⁶ By September 1927, Gibbs had developed a bid for the Olmsted Brothers, a \$67,000 fee for a study excluding any actual construction drawings. "Parks" would be defined in the "most broad sense of all kinds of facilities for public outdoor enjoyment and recreation," with the report providing a "complete and well-balanced system in combination with principles for governing the selection of parks." Olmsted, Jr. recognized the pressing political and financial issues, and continued:

The extent of the [Los Angeles] area, the size of the present and prospective population, its complex and rapidly shifting political, social and economic organization, the notable inadequacy of its present park facilities, and the peculiar financial difficulties presented by the generally high and rapidly shifting speculative land values and by the high ratio of new capital investment needed per annum for improvements of all sorts...make the problem a large and difficult one.⁷

Using a commonly employed Olmsted Brothers' template, *Parks, Playgrounds and Beaches* began with a policy discussion, followed by specific examples of how to create and

⁶ George Gibbs to Frederick Law Olmsted, Jr., Letter, 14 July 1927, [Los Angeles County, General], #8100, O.A. Papers. This letter also confirms the more technical aspects of the report were completed by Bartholomew and Associates, with the body written by Olmsted, Jr. Gibbs wrote, "Mr. Cheney has been following this [parks contract development] and was quite disturbed and has rather antagonized the others because he heard that they contemplated employing Bartholomew and Associates for the technical work." Apparently, Cheney believed that the three who had completed the *Major Traffic Street Plan* should also work together on the park and parkway plan.

⁷ Frederick Law Olmsted, Jr. to William H. Pierce, former City Planner Commissioner and founder of Los Angeles Chamber of Commerce, Letter, 12 April 1927, [Los Angeles County, General], #8100.

finance a regional park system. A chapter was dedicated to Los Angeles culture, its demographics, housing, transportation, and expected population growth, as well as natural systems and scenic resources. Issues were both cultural and ecological:

The pressure of growing masses upon the now available beaches, canyons, forests, and country roads is lessening their attractiveness and producing unfavorable reactions in newcomers. The beaches, which are pictured in the magazines to attract the eastern visitors, are suffering from the rapid encroachment of private use; the wild canyons are fast being subjected to subdivision and cheek-by-jowl cabin construction; the forests suffer annually from devastating fires; the roadsides are more and more disfigured by signboards, shacks, garages, filling stations, destruction of trees, and multiplication of poles and wires.⁸

The report ended with a detailed discussion of 99 listings of proposed parks and parkways— sometimes a description of their basic design—in addition to the routing of all into a single connected system. A key element of parks was that there would be overlap in function, that is, recreation overlapped in schools, highways, and commercial areas including private clubs and golf courses. The shared function of spaces would enable a shared cost such that overlap in highways that required flood-control could find funding from multiple sources.

Developed as a regional plan, the proposal linked the county's existing and new green spaces, sites that included parks, playgrounds, cemeteries, golf courses, country clubs, recreational spaces, hospital grounds and even a county farm. The proposal showcased a range of ecosystems, and a range of communities, to meet a range of needs in recreation, planned open space, and transportation. In response to the regional ecology, the plan would work with the four watersheds in Los Angeles: Los Angeles River, Santa Monica Bay, Ballona Creek, and Dominguez Channel. The eastern edge of the plan extended into the San Gabriel River watershed as well (Figure 8.2). If the full proposal had been implemented, it would have incorporated the regional hydrology, biology, geology, and social construct of Los Angeles into one plan.

⁸ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 23.

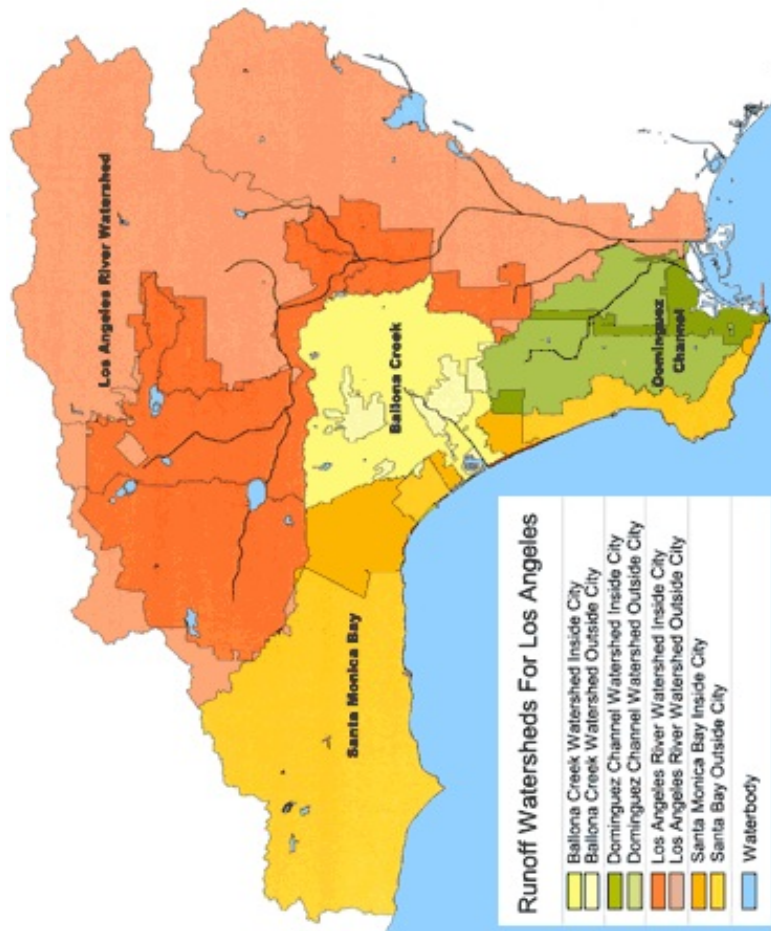


Figure 8.2: Watershed map of Los Angeles River, Santa Monica Bay, Ballona Creek, Dominguez Channel. Los Angeles County has four watersheds. Missing from this view is the San Gabriel River watershed directly east of Dominguez Channel. Credit: LA Stormwater: LA's Watershed Protection Program

PLANNING THE REGIONAL CITY

Development of a Methodology

Considered a subfield of urban planning, regional planning is broader in scale, and uses planning methods to determine best land use and infrastructure while anticipating growth. In an era of efficiency and order, the 1920s' population growth in major American cities required a more regional plan for expansion of communities, infrastructure, and conservation of natural resources. Thomas Adams was the General Director for the *Regional Plan of New York and its Environs*, a report that included not only New York, but New Jersey and Connecticut, a territory of 5,528 square miles. The report looked to a regional council of 150 expert members, affiliated planning commissions, and other civic groups interested in the New York region. Research extended from 1922 - 1929 with various committees who informed the larger general plan. Engineering divisions and planning studies were supplemented by architectural, economic, social, and legal divisions. Frederick Law Olmsted, Jr. acted as a consultant on two of the committees: Advisory Engineering and Advisory Planning. By 1929, the Olmsted firm had designed numerous park and parkway systems throughout the country and in Canada, and were experts in this aspect of their practice.⁹ However, prior to the comprehensive work in Los Angeles, it can be argued that the methodology for planning in Southern California was influenced by Olmsted, Jr.'s 1922 work on *Regional Plan of New York and its Environs*.

The Advisory Engineering Committee consisted of 10 members in various types of engineering or aligned disciplines including Jay Downer, who was also a Westchester County Park Commissioner, and Charles W. Leavitt who, like Olmsted, Jr., was a landscape architect and urban planner. For the second committee, the role of the Advisory Planning

⁹ By 1929 the firm had given advice or developed full plans for Baltimore, Maryland, Birmingham, Alabama, Bridgeport, Connecticut, Brooklyn, New York, Buffalo, New York, California State Parks, Cambridge, Massachusetts, Charleston, South Carolina, Chicago, Illinois, Denver, Colorado, Detroit, Michigan, District of Columbia, Lexington, Kentucky, Milwaukee, Wisconsin, Montreal, Quebec, New London, Connecticut, New Haven, Connecticut, New Orleans, Louisiana, New York City, Newport, Rhode Island, Niagara Falls, Ontario, Pawtucket, Rhode Island, Portland, Maine, Portland, Oregon, Providence, Rhode Island, Rochester, New York, Seattle, Washington, Spokane, Washington, Utica, New York, Waterbury, Connecticut, Wilkes-Barre, Pennsylvania and Boston, Massachusetts.

Group was to develop regional maps and reports of land use and circulation. Chairman Thomas Adams was on this committee along with Harland Bartholomew (assisted by L. Deming Tilton), Edward Bennett, George W. Ford, John Nolen, with Henry V. Hubbard assisting Olmsted, Jr. Through their studies the committee would ascertain both possibilities as well as dangers from existing growth and trends for urban expansion, character of circulation, and amenities. Motor traffic would be investigated to ensure sufficient investment of highways as well as adequate open space for protection of water supplies, recreation, and food production.¹⁰ For the purpose of the study, the planning consultants divided the region into six sectors, varying in size from 641 to 1,194 square miles. Olmsted, Jr. and Hubbard made a reconnaissance survey and used USGS maps at 1" = 2000' for their study, as these maps were precise and included important existing conditions such as topography, water bodies, as well as roads and some land ownership.

Findings from the Planning Committee voiced many of the opinions that Olmsted, Jr. would later address in the Los Angeles proposal. For example, in New York there was an inadequate amount of recreational spaces adjacent to schools, and a lack of prudence in land acquisition and protection in waterfront areas. Optimistically the report noted that there were still opportunities to acquire land overlooking tidal water, lakes, and along the river banks if bought without delay. Additionally, protection was needed for water supplies and development of park areas on "wild rocky land in the catchment and reservoir areas." Maintained green belts containing farms, forests, and local recreation would separate the land from the impacts of adjacent residential development; and of course, the committee advocated parkways to connect parks and recreational spaces. Thomas Adams recorded that these studies were done in collaboration with both "public authorities and influential citizens." Budgeted in 1926, the cost of construction of the New York regional plan was nearly \$3,000,000,000, an astronomical amount which excluded the port and harbor trunk-line railroad improvements, highways, and parks. "The money which will carry out the Plan of New York," report advisor Charles D. Norton contended, "is the money which New York will spend in any event, whether it has a plan or not. With a city plan, expenditures can proceed along permanent lines; without it, public expenditures are diverted into projects

¹⁰ Thomas Adams, *Regional Plan of New York and its Environs* (Philadelphia: William Fell Co., 1929), 10, 11, 60.

which are not enduring, and are therefore wasteful.”¹¹ With the cost spread over decades, it was intelligent planning and therefore economical when seen with foresight.

Natural systems in Los Angeles County

Frederick Law Olmsted, Jr.’s methodology in New York was adapted for a careful examination of Los Angeles. Maps from the Automobile Club of Southern California were cheap and to scale, and were used consistently for graphic representation of general layouts such as the master plan and regional map. For analysis that required more in-depth data, USGS maps from 1920 ensured accuracy in topography, hydrology, existing green spaces, land use, and jurisdictional boundaries (Figure 8.3). This careful physical survey of the county in 1929 was in addition to the 77 Los Angeles County projects that the Olmsted Brothers had designed or built by 1929, and collectively provided biophysical and cultural data developed over the course of years of local work.

A review of Olmsted Jr.’s expertise of Los Angeles included a wide range of knowledge. Los Angeles has significant variance in climate ranging from *Sunset Western* zones 7 - 24, a modern zonal method that describes vegetation hardiness based on temperatures and precipitation within these areas. Olmsted Brothers projects were among climate zones 15 - 24 which, through the course of landscape development of planting, grading, and drainage plans, would have required microclimate expertise.¹² Many Olmsted Brothers projects were also located near water elements, such as the L.T. Edwards residence in Los Cerritos near the Los Angeles River floodplain or the small community of Laughlin Park Heights, Hollywood, along the edge of Griffith Park.¹³ Olmsted, Jr. had used U.S. Coast and Geodetic Survey maps of ocean data for his survey of state parks while the 1920 USGS maps noted water flow patterns in the County. In the course of site investigation for the Hollywood-Palos Verdes parkway design, accurate flood control datum was needed in order to locate structures above the 100-year flood line (Figure 8.4) and topographic maps were a requirement in all Olmsted firm projects.

During the state parks survey, Olmsted, Jr. collected in-depth reports for Los Angeles and nearby Orange County defined as Districts X and XI. The tabular system for

¹¹ Adams, *New York and its Environs*, 62, 63, 79, 80.

¹² See *Sunset Western Garden Book*, ed. Kathleen Norris Brenzel (Menlo Park, CA: Sunset Publishing, 2007), 50-51.

¹³ See Olmsted Brothers jobs [L.T. Edwards], #8244, and [E.M. Nutting], #8205 for Laughlin Park Heights.

state parks identified scenic ratings, slope conditions, vegetation character, and recreational possibilities with the 1928 Scenic Resources map locating vegetation types in Los Angeles from brush areas to pine forests. A map was created for *Parks, Playgrounds and Beaches* with cultural and natural zones, as the regional map located residential, industrial, and commercial districts, as well as mountain and hill districts, blending much of the site analysis into a larger regional understanding of the county (Figure 8.5). Through field studies and regional knowledge, Olmsted, Jr. sketched on the USGS maps existing and proposed green spaces in the county. By 1929, he was an expert on the region's ecological and cultural landscape.

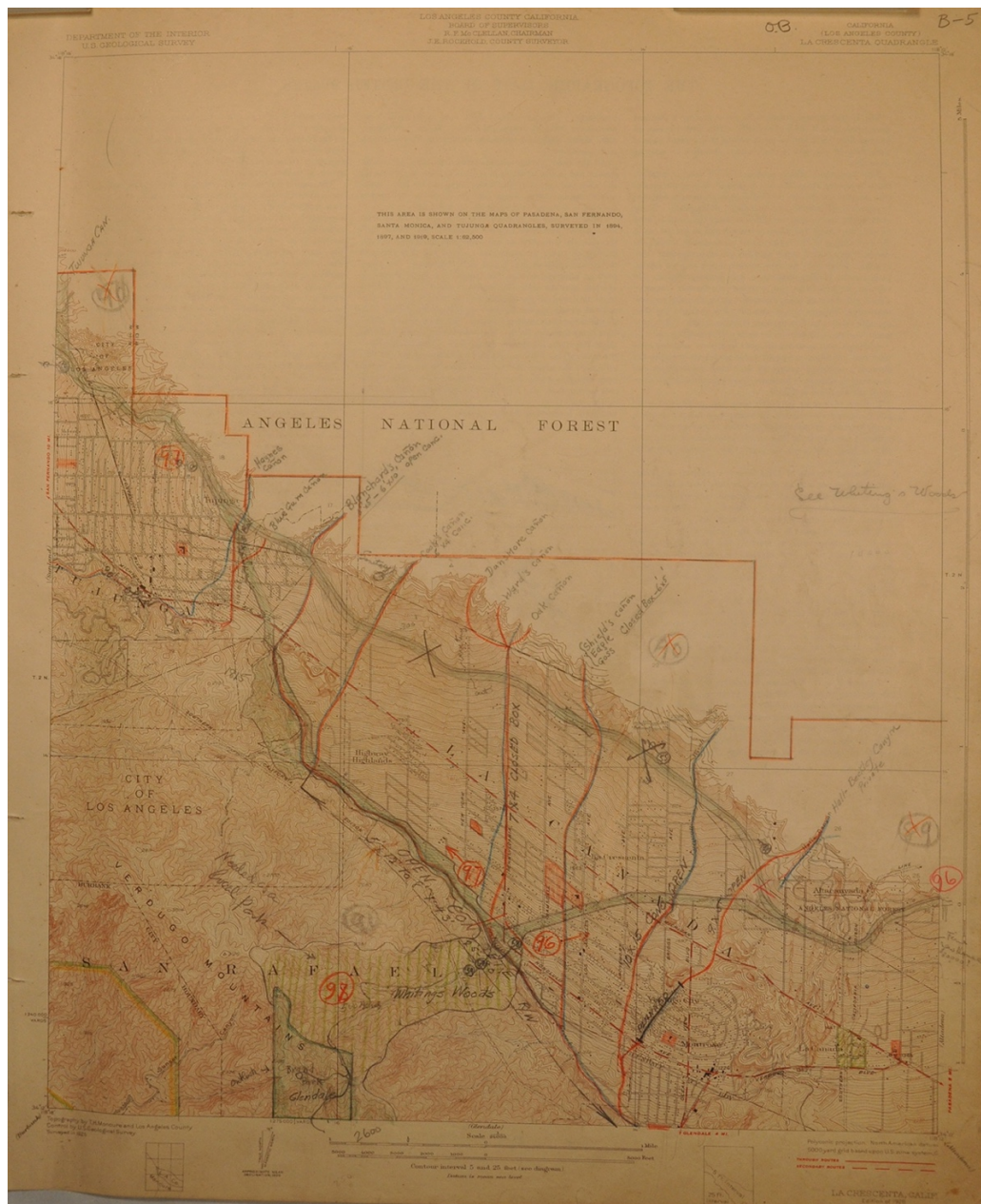


Figure: 8.3: B-5 USGS map, 1929. Olmsted, Jr. hand-drew the park proposal on USGS maps. Red lines reveal the flow pattern of water from the top of the watershed. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

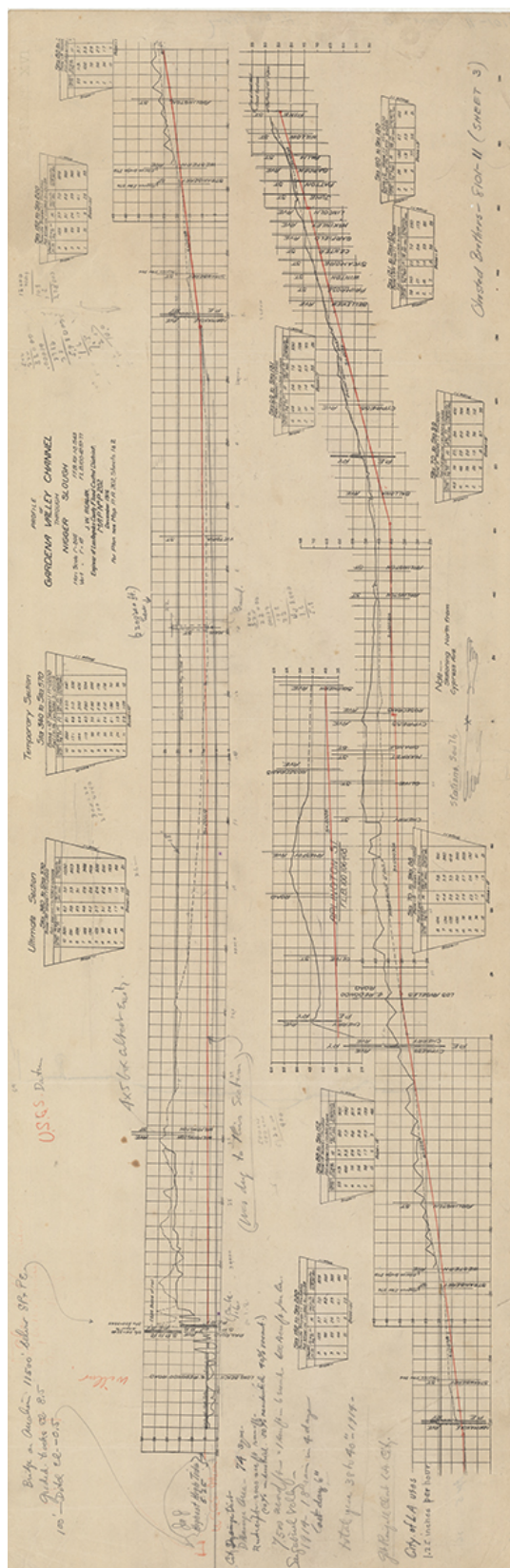


Figure 8.4: Profile of Gardena Valley Channel through Nigger Slough, 1916. Flood control datum through Gardena Slough to estimate high water levels during the flood of 1914. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site



Figure 8.5: Map showing the Region divided for convenience into classes of use, residential districts "A, B, C, D, E, and F," mountain and hill districts [sic] "M," and industrial districts "Y," and each district or portion of district numbered for convenience of reference as listed in school and park lists in appendices No. I and No. II. (Base map by courtesy of Automobile Club of Southern California.). Regional map of Los Angeles outlined by land use and topography, Plate 25 from Parks, Playgrounds and Beaches, 1930. Credit: Parks, Playgrounds and Beaches for the Los Angeles Region. The Huntington Library, San Marino, California. Digital image by Christine Edstrom O'Hara.

WATERSHED MANAGEMENT APPROACHES

The current definition of watershed management is a study of relevant characteristics of the watershed in order to plan for its function, affecting plant, animal, and human environments, and also managing water including its supply, quality, drainage, stormwater runoff and even water rights. By 1929, within *Parks, Playgrounds and Beaches*, parks were no longer defined in a Romantic and picturesque vision, but instead categorized by land use and water resource: Shore Front Roads and Park areas; Large Upland Reservations; Large Drainage Basin Reservations; Narrow Drainage Basin Reservations; Connecting Parkways; and Enlargements of especially valuable lands, athletic fields, golf, etc.¹⁴ The park proposal was a watershed design, intended to work with the existing hydrology and protect ridgelines, understanding the relationship of the upper watershed and its influence on water quality and flow.

Written at nearly the same time was another regional park system designed around the watershed of East Bay cities in Northern California which adds to our understanding of Olmsted, Jr.'s Los Angeles report. Co-authored with National Park Service Chief Naturalist and Chief Forester Ansel F. Hall, Frederick Law Olmsted, Jr. wrote *Report on the Proposed Park Reservations for East Bay Cities*, published in December 1930.¹⁵ According to Samuel C. May in the report's introduction, by 1928 it had become necessary for the East Bay Municipal Utility District to purchase entire properties of the East Bay Water Company, containing thousands of acres of land no longer needed for water catchment or storage. The Olmsted-Hall report was a comprehensive survey of the recreational needs of the East Bay communities with special reference to water district lands, and recommendations on surplus lands best adapted for park and recreational use. The two consultants also recommended purchase of then privately-owned land that was both "socially and economically expedient for the communities concerned."¹⁶ While the East Bay District straddled nine municipalities, Olmsted, Jr. and Hall argued that park reservations not follow

¹⁴ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 100.

¹⁵ See Olmsted Brothers and Ansel F. Hall, *Report on Proposed Park Reservations for East Bay Cities* (Berkeley: Bureau of Public Administration, University of California, 1930). The East Bay cities were comprised of Alameda, Albany, Berkeley, El Cerrito, Emeryville, Oakland, Piedmont, Richmond and San Leandro, and jointly managed as the East Bay Municipal Utility District.

¹⁶ Olmsted Brothers and Hall, *Park Reservations for East Bay*, Forward.

jurisdictional edges, but use ecological boundaries of a “topographical unit.” Like Los Angeles, the proposal incorporated water elements such as reservoirs, lakes, and abandoned dams, and also shared much of the same language as *Parks, Playgrounds and Beaches* arguing for the vital need of parks.¹⁷ Surplus watershed lands or “water reservation areas” were preserved as a regional system of recreational parks left essentially in their open space conditions, but with carefully added roads and overlook points. Olmsted, Jr. and Hall concluded that all of the front lands owned by the district and not required for reservoir purposes should be “dedicated to park purposes, and should be held as park reservations, forest reserves, wilderness areas, or open parklike pasture land.”¹⁸ Their plan, like in Los Angeles, considered a watershed management approach for storage, drainage, and securing of water rights, but balanced for recreational use (Figure 8.6).

Hybrid designs for the Watershed

The Los Angeles park and parkway system was chiefly grouped along three east and west routes, called the mountain chain, coast chain, and hilltop chain, where locations all began at the highest elevation and generally followed the Los Angeles watersheds where parks were classified by their watershed function. Seeking multifunctional human-nature designs, Olmsted, Jr. reminded the Los Angeles’ Citizens’ Committee that the parks and parkways were located where they would also provide flood control and manage water conservation problems. The Olmsted Brothers’ long-term design of Rahway River Park in Union County, New Jersey, 1922 - 1962, was a river reclamation project which conserved and protected the river within the watershed and was one of many Olmsted-designed park and parkway plans used to protect water resources. Los Angeles was different, however, in

¹⁷ Note the same warning that if the East Bay wanted to keep the contiguous large reservations the community needed to act quickly before private development: “With the growth of a great metropolis here, the absence of parks will make living conditions less and less attractive, less and less wholesome. In so far, therefore, as the people fail to show the understanding, courage, and organizing ability necessary to grasp the present opportunity, the growth of the region will necessarily tend to choke itself.” Olmsted Brothers and Hall, *Park Reservations for East Bay*, 16.

¹⁸ Olmsted Brothers and Hall, *Park Reservations for East Bay*, 23. While the two watershed plans were developed at the same time, in a comparison of the Los Angeles proposal with the East Bay Regional Parks report, Terrence Young analyzed the language of the two reports and concluded that the Southern California report “demonstrated the greater emphasis on science and rationality of expertise.” See footnote 29, Young, “Moral Order,” 355.



several ways. In the 1920s, the Los Angeles and San Gabriel Rivers did not need reclamation, and unlike rivers in previous projects, the Los Angeles rivers did not flow year-round. How to design with often subterranean rivers had no previous models. Water data was provided by local hydrology experts, such that Olmsted, Jr. believed the design risk of the parks and parkways as water management elements would succeed. His infrastructure designs in Los Angeles addressed many of the 21st century goals of roadways, and created new public space adapted to ecology, culture, and urban design in landscape form and function.

Innovation for water management was not limited to parkways. Considered large parks, regional athletic fields played both a cultural and ecological role. In order to have the most use, Olmsted, Jr. recommended that field locations be only one trolley stop away from most homes asserting that “such areas, if they are to meet the particular purpose for which they are proposed, should be within easy reach of a large number of young people at a minimum cost for transportation. They should, therefore, be easily accessible by the street cars for a single carfare.”¹⁹ Located on level ground with at least 100 acres of space, these outdoor recreational areas were located in the river washes where inundation would not damage them. River washes at the base of the mountains in the San Fernando Valley and San Gabriel Valley had historically provided water infiltration and groundwater recharge into the alluvial soils. Athletic fields would be dry most years, but have the ability to manage overflow when necessary (Figure 8.7). Other recreational fields in the county were located in river bottoms and marshy areas such as the Ballona Creek Basin, a park classified as a Narrow Drainage Basin, where Olmsted, Jr. suggested these fields could be planted like meadows. In concert, the park and parkway system in Los Angeles was designed to follow all water resources in hybrid greenbelts of water management.

Role of Open Space in Reservations

Chapter 7 of *Parks, Playgrounds and Beaches* was dedicated to Olmsted, Jr.’s recommendations for large reservations of mountains, canyons, deserts and islands. “Large continuous mountains areas, preserved substantially in a natural condition, have an important scenic value... and in many cases a large economic value as a partial source of water supply,” he wrote. The aridity of Los Angeles along with hundreds of miles of

¹⁹ Olmsted Brothers and Bartholomew, *Parks, Playgrounds, and Beaches*, 81.

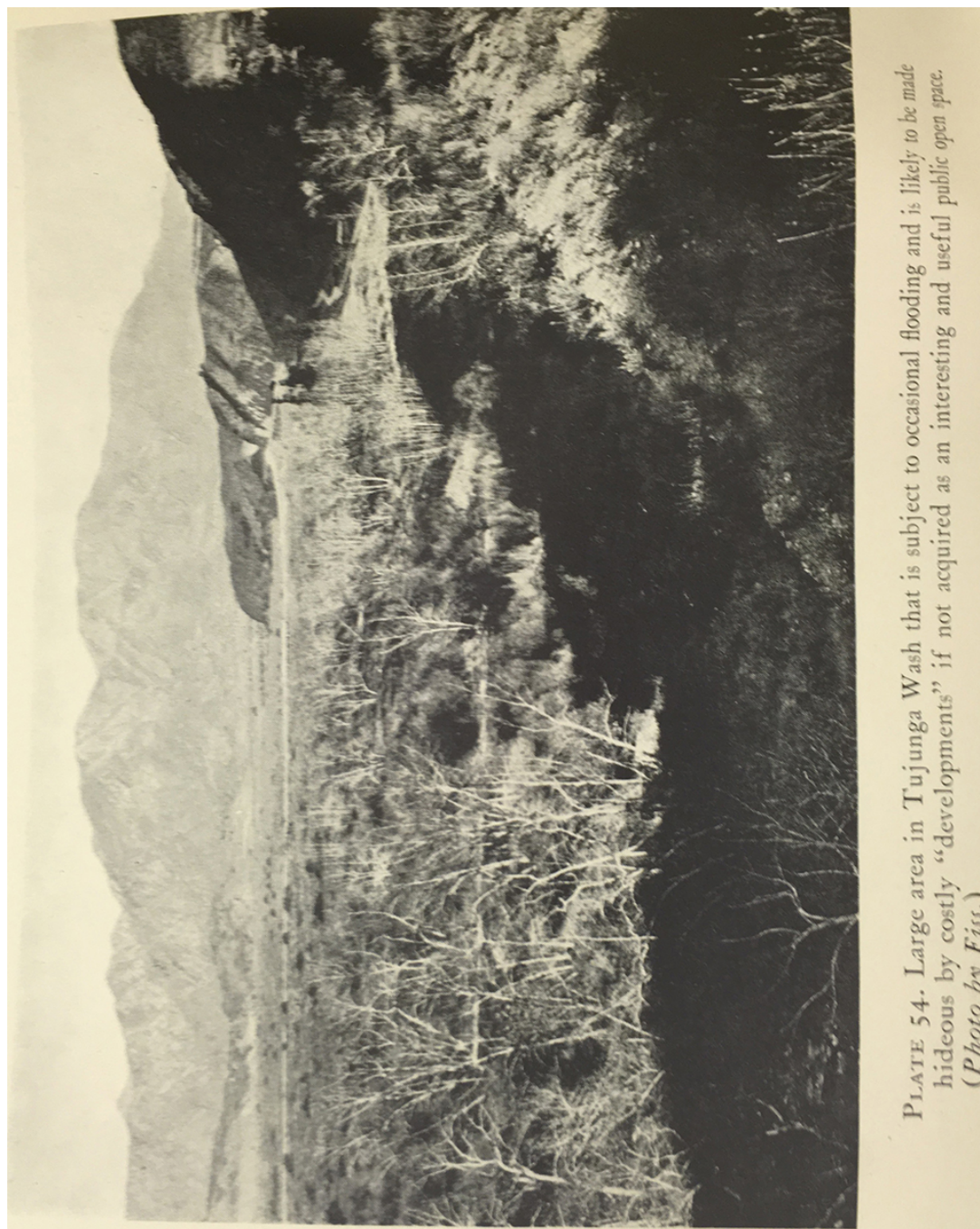


Figure 8.7: Large area in Tujunga Wash that is subject to occasional flooding and is likely to be made hideous by costly "developments" if not acquired as an interesting and useful public open space. An example of a river wash that could be maintained as open space or recreational fields. Credit: Parks, Playgrounds and Beaches for the Los Angeles Region. The Huntington Library, San Marino, California. Digital image by Christine Edstrom O'Hara

mountainous country had helped preserve these lands from private development, but it was only a matter of time, Olmsted, Jr. reminded, before there would be encroachment. “The natural resistance of some of the mountain lands to uses destructive of their recreational value has been reinforced by the farsighted action of the Federal Government in setting apart large areas as national forests for protection of watershed vegetation and related public purposes.”²⁰

The Angeles National Forest was 640,000 acres of preserved land, located within the heart of Los Angeles. Permanent reservation of thousands of acres of similar steep, brush-covered mountain slopes could be preserved both for recreational value as well as “protection of watershed values.”²¹ By the 1920s, there was sophisticated knowledge of silviculture, or the management of forests, which recognized the value of maintaining watershed vegetation for groundwater recharge and water supply.²² The United States began professional forest management initially with the Division of Forestry in 1881, followed by the Forest Act of 1891 which authorized President Theodore Roosevelt to designate public lands in the American West as “forest reserves.” By 1905, these responsibilities were transferred to the Department of Agriculture’s new U.S. Forest Service under Chief Gifford Pinchot. While designing the Biltmore Estate in Asheville, North Carolina in the 1890s, Frederick Law Olmsted, Sr. convinced client George Washington Vanderbilt to hire the young Pinchot to develop a forest management plan for the site’s over-farmed 80,000 acres. The Biltmore was his first professional project where he implemented a management plan to identify tree species, growth conditions, volume of timber by acre, and improve the forest with selective thinning.

Protection of the forest served as erosion control and absorption of rainwater protected the watershed. Noting the big pines and firs, Olmsted, Jr. seemingly used E.P. Meinecke’s words when he said that these trees could only stand a “limited amount of trampling and cutting and regrading about their roots, and intensive use of the grounds might so affect these trees that they will become weakened and will fall ready prey to the ravages of pests and diseases.”²³ Protection of vegetation protected the watershed and allowed its ecosystem to be maintained in healthy form. Bridging open space with

²⁰ Olmsted Brothers and Bartholomew, *Parks. Playgrounds and Beaches*, 10.

²¹ Ibid.

²² See Stephanie Pincetl, *Transforming California*, 39.

²³ Olmsted Brothers and Bartholomew, *Parks. Playgrounds and Beaches*, 91.

roadways, Olmsted, Jr. recounted transportation engineer J.B. Lippincott's 1919 report to the Automobile Club of Southern California. Lippincott called for a connection of the city to the desert—from Pasadena, Azusa or San Dimas to desert lands—and if the roadway was sited properly, it would not only be scenic but serve as multifunctional “parkway, a traffic road, and means of protecting the forest reservation.”²⁴

Reservations were not limited to the forests, however, as Olmsted, Jr. recommended regional beach reservations, offering that “one could make an even more striking statistical showing of a speciously great per capita extent of open spaces adjacent to Los Angeles by reckoning as such a few million acres of the Pacific Ocean, which certainly has recreational value.”²⁵ Broadly defined, the Pacific Ocean was open space and Olmsted, Jr.'s diatribe on tideland ownership from the *State Park Survey* was renewed in this report. Beaches had the most public demand in the Los Angeles region. How does a landscape architect design a beach as a park in open space? Olmsted, Jr. provided a rather technical section drawing which married design, use, and policy of tidelands ownership. One hundred thirty feet of setback from high tide created the “beach” area. A 30-foot promenade allowed pedestrians to see the sea without going onto the sand, while a rather narrow 50-foot border drive was for pleasure driving along the coast, allowing another 108-foot width for parking. A traffic road, street car line, and local street all were used to push private property development back 500 feet from high tide. Beach development would not be obstructed by buildings and the designed spaces could be potentially flooded without significant property loss. (Figure 8.8).

Reservation lands were scattered throughout the 99 proposed parks and parkways in order to keep these lands set aside for the public in perpetuity. High in the mountains, Angeles Forest was among ten recommended reservations already fairly accessible to the public. Alondra Park, the crossroads land for the Hollywood-Palos Verdes Parkway, could also be a reservation, and a “parkway reservation” was designed in San Pedro (Figure 8.9). Bolsa Chica, a marsh reservation near the Pacific Ocean, was an estuary plus bird refuge. From the top of the watershed to the mouth of the rivers to the sea, open space maintained water supply, preserved vegetation, prevented erosion, and protected wildlife in public space, all while also allowing recreational use of the lands.

²⁴ Olmsted Brothers and Bartholomew, *Parks. Playgrounds and Beaches*, 92.

²⁵ Olmsted Brothers and Bartholomew, *Parks. Playgrounds and Beaches*, 10.

Significant understanding of the county provided key links for creation of desirable human use in locations best adapted to the local ecology. Additional benefit was that these places were designed as hybrid landscape types. “If a given piece of public property can be used effectively for two or more purposes, it ought to be so used rather than withdraw a second piece of property from other use or forego the accomplishment of one of the purposes,” Olmsted, Jr. wrote in his 1920 essay, “Parks and Playgrounds.” A park meadow could be used for baseball and other games, for example, without thwarting the use of either. Another multiplicity of services was through the use of certain park lands and water supply purposes, such as a single space functioning both as a public swimming beach and a distributing reservoir for city water supply, or alternatively, trade a natural park lake used for recreation for a needed reservoir.²⁶ (Figure 8.10). Olmsted, Jr. was frustrated by those not aware of how to best use deleterious landscapes, such as poorly draining sites which could be ideally suited for park use. When design failed to respond to the opportunities and constraints of a site, Olmsted, Jr. believed this was more than poor design, especially when it became a community problem. If planners studied the landscape first, then thoughtful design accompanied by police regulation in floodways could protect communities, mitigate flooding, and provide recreational amenities. Moreover, multifunctional, hybrid landscapes could partially fund the cost of land acquisition to other resources.²⁷ His infrastructure designs were both local and metropolitan in impact.

²⁶ Frederick Law Olmsted Jr., “Parks and Playgrounds,” *American Magazine of Art* 11, no. 9 (1920): 310-311.

²⁷ See Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 38, 110, 115-116.

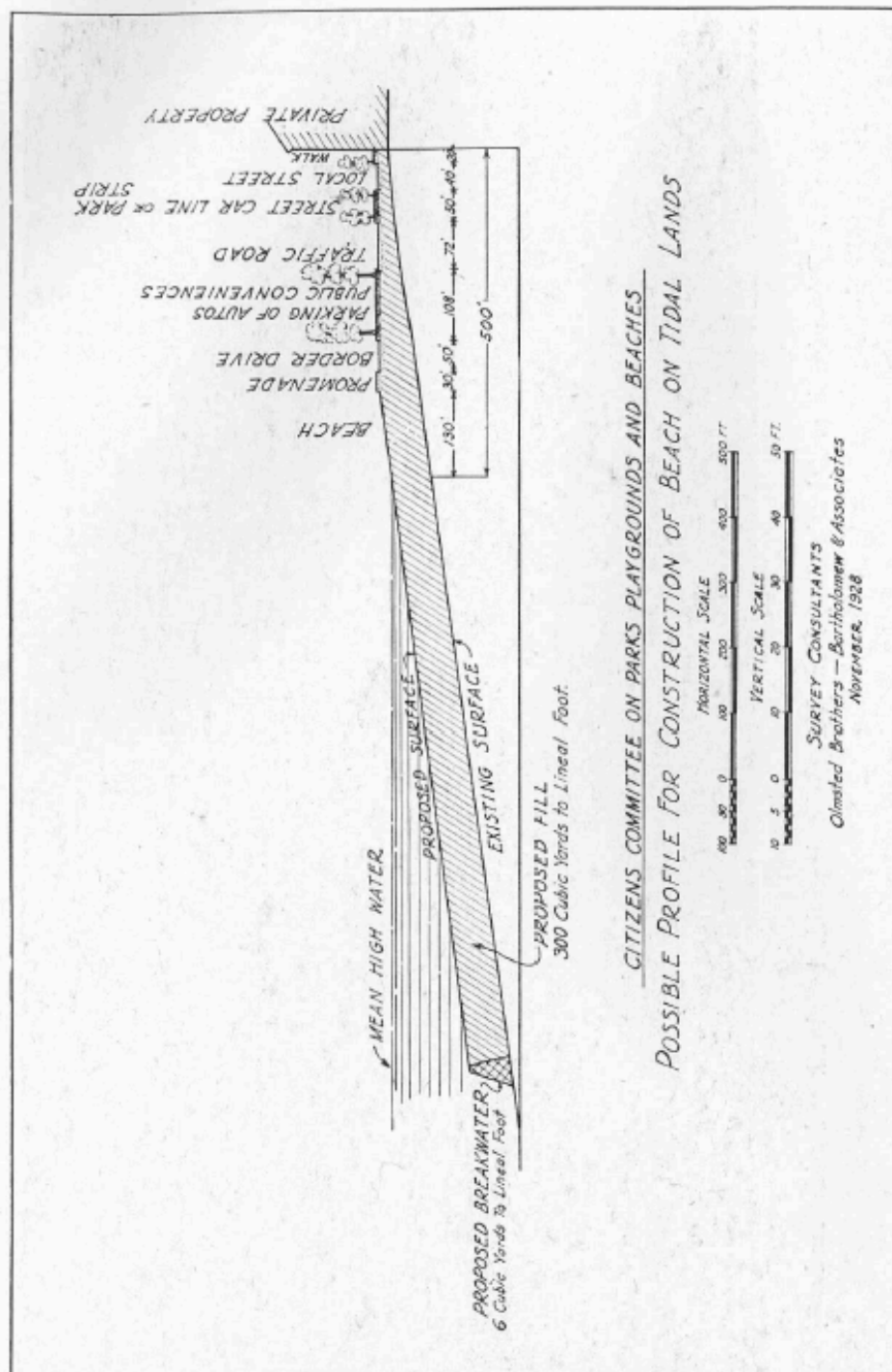


PLATE 31. Possible profile for construction of beach on tidelands.

Figure 8.8: Possible profile for construction of beach on tidelands, 1930. Section view of beach to allow shore to maintain natural hydrology, Plate 31 of Parks, Playgrounds and Beaches. Credit: Parks, Playgrounds and Beaches for the Los Angeles Region. The Huntington Library, San Marino, California. Digital image by Christine Edstrom O'Hara.

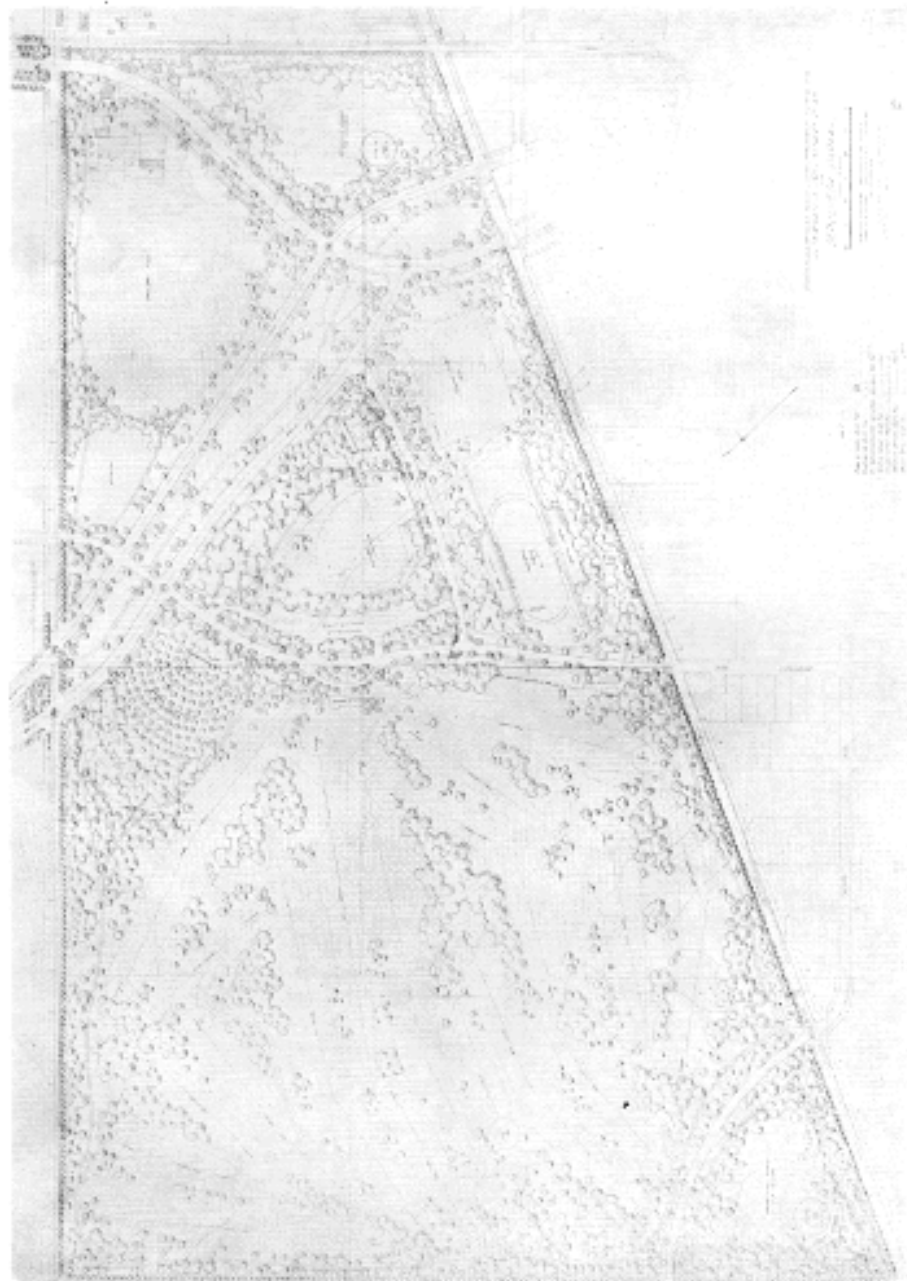


PLATE 18. Design for Alondra Park, 115 acres, recently acquired by the County.

Figure 8.9: Plan for Alondra Park, 1926. While the design has elements of formality, Frederick Law Olmsted, Jr. considered this a reservation. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site



Figure 8.10: Keeny Park in Hartford, Connecticut (top) and Treatment of River Front, Harrisburg, Pennsylvania (bottom). Images from Frederick Law Olmsted, Jr.'s 1920 essay "Parks and Playgrounds" as examples of multifunctional use of water supply and recreation. Credit: Frederick Law Olmsted, Jr., "Parks and Playgrounds" The American Magazine of Art 11, no. 9 (1920): 307, 311.

“THE EXAMPLE OF PALOS VERDES”

This thesis began with the case study of Palos Verdes and comes full circle in this watershed study as Olmsted, Jr. noted its exemplar design in *Parks, Playgrounds and Beaches*, referencing the project 32 times in his report. The notion of designing first with the landscape was embodied in the Olmsted Brothers’ design process of this community, and while the firm applied then-modern planning ideals, they were in response to the site’s existing natural systems. In Palos Verdes, Olmsted, Jr. was able to hybridize landscapes to affect multiplicity of function. A subsection of *Parks, Playgrounds and Beaches* was entitled “The Example of Palos Verdes” and remarked that community parks were combined with school playgrounds for greater recreational use and that 25% of the community was set aside as park-open space (Figure 8.11). Dramatically illustrated with an unobstructed ocean view, Palos Verdes had over 65,000 linear feet of beach front, more than any other regional community, and this recreational and aesthetic amenity was further protected by the “existence of the reservation along the shore”²⁸ (Figure 8.12).

Park proposal number 36 named “In-Town Parkway,” was also linked to Palos Verdes as the roadway extended from Baldwin Hills and Ballona Creek, in a segment of the Hollywood-Palos Verdes Parkway. Hollywood-Palos Verdes Parkway itself was park proposal number 39, with Alondra-Palos Verdes Parkway, an important link in a pleasure route from the city to the sea. The Arroyo Seco and Palos Verdes loop chain drive afforded one to extend their route from the mountains to the sea, ending again at the community designed by the Olmsted Brothers. Unshackled by politics and budgets, Olmsted, Jr. was able to design Palos Verdes as an embodiment of all his theoretical and best-management approaches as a landscape architect, showcasing the way he felt design should be accomplished in Los Angeles County. The designs included hybrid school grounds/community parks, parks/open space, parkways/flood management, with the landscape serving as infrastructure for the design framework.

²⁸ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 78.



Figure 8.11: Sketch for 250 acre public park in SE corner, 1933. Playfields were mixed with open space and a golf course in this Palos Verdes design. Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site



Figure 8.12 Palos Verdes Coast Road, 1926. Example of Palos Verdes showing beach reservation. Credit: Palos Verdes Library District Local History Collection

AGGREGATION OF THE OLMSTED LEGACY, 1903 - 1930

The Los Angeles park and parkway system was a master plan showing exemplar strategies responsive to the semi-arid ecology and designs that mitigated drought and flood. It was a design at a watershed scale which unified all the water elements of the county into one plan. Understood at this scale, water in Los Angeles would have been creatively managed, in roadways, as athletic fields, in marshes as wildlife habitat, leaving the hydrology largely intact and un-channeled. The design appreciated, conserved, and sometimes preserved, the regional landscape and its vegetation. It countered landscape perceptions like those of William Mulholland, architect of the Los Angeles Aqueduct, built to ensure Los Angeles remained irrigated and green year-round, despite this unsustainable rejection of the regional climate.

The range of Olmsted Brothers designs over the course of nearly 30 years at a variety of scales, from small-scale gardens to large-scale infrastructure, was foundational for understanding Los Angeles at a regional scale. Olmsted, Jr.'s long-term residence in Palos Verdes also factored into a critical ecological grasp of the region. Mapping the location of all 77 built and proposed design projects by the Olmsted Brothers from their initial 1903 Catalina Island consult, through the 1920s' residential and commercial projects, parkways and parks, the 1930 master plan was routed to include nearly all their Los Angeles projects. The firm's still unbuilt work had been added to open spaces legally excluded from the *State Parks Survey* by incorporation into the master plan. Perhaps this was a way to find funding for design work completed over numerous years, but held unbuilt and in abeyance by politics and economics. If the Los Angeles park proposal had been built, it would have created a legacy for Frederick Law Olmsted, Jr. similar to the frequently cited Boston Park system design by Olmsted, Sr. and Charles Eliot. It is difficult to predict the long-term effects of this plan on Los Angeles residents and their perception of landscape beauty. It is clear, however, that Los Angeles would have a different urban footprint had the Olmsted plan been constructed.

CLOSING OF THE WESTERN OFFICE

The prolific work by the Olmsted firm came to an economic collision, as the financial consequences of the Depression began to affect West Coast construction. Olmsted Jr. had originally planned to retire in Palos Verdes; however, he changed his mind by 1930. Writing to Palos Verdes manager Jay Lawyer, he explained:

As I told you at our last talk in your office, I then thought it likely that the demands on my time in the east would continue so large, and the demands on my time in the West would continue relatively limited, as to make it unreasonable to keep on much longer maintaining my household headquarters at Palos Verdes. Doing so of late has compelled me to spend the greater part of my time thousands of miles away from my family and “batching it” in hotels, clubs, etc. within striking distance of my Brookline office; all of which seems quite absurd when I have a perfectly good house and grounds in Brookline where we might be very comfortably living together. Since I talked with you it has become much clearer that the sensible thing for me to do is to give up attempting to live at Palos Verdes...Unless it should prove quite impractical to do so, I want to maintain our western office at Palos Verdes, in charge of Mr. [George] Gibbs with occasional visits at rather long intervals by Mr. Dawson or myself.²⁹

Olmsted, Jr. sold his Palos Verdes home in 1931 and returned to Boston with his family to continue practicing from his Brookline, Massachusetts office. While he offered a legitimate excuse to Jay Lawyer, one must consider the developments up to this point. Despite garnering political relationships and a proven record of successful built projects, the failure of the large-scale projects surely affected his interest in remaining in Los Angeles. Leadership in Los Angeles was unwilling to support the costs and sacrifices that the Olmsted plans required, especially for a city which historically favored short-term private property rights over long-term investment in its community. In 1930, Los Angeles was still rich in open space such that there lacked an immediacy in developing an expensive park system.

This lack of foresight also failed to recognize the value of setting aside open space which would have not only reduced private development along the ocean and in the mountains, but offered the county a way to manage the watershed. The Olmsted firm is best known for built projects on the East Coast, but culture was also different in that part of

²⁹ Frederick Law Olmsted, Jr. to Jay Lawyer, Letter, 12 June 1930, [Palos Verdes], #5950, O.A. Papers.

the country with a more progressive sense of stewardship, and the density in East Coast urban cities required a collective purpose in planning. The effect of eventually closing the Palos Verdes office in 1935 not only abandoned future work in Los Angeles, but a lasting legacy as well. Sadly, the firm is better known for their unbuilt work than their built projects in Los Angeles. The consequences of failing to construct the park and parkway plan has had lasting negative effects on the health of inner city residents with a dearth of green spaces for recreation. With no plan, the land was generally developed without ecological considerations.

LESSONS AND LIMITATIONS IN ECOLOGICAL PLANNING

A critical reading of *Parks, Playgrounds and Beaches* offers lessons for regional watershed designs, with the Los Angeles park and parkway proposal at a scale significantly larger than any other single landscape architecture firm's work at the time. It accounted for not only vast geography, but complex cultural and natural systems within it. The Los Angeles plan expanded Olmsted, Jr.'s Garden City application in Torrance to a regional Garden City typology, replete with copious amounts of multifunctional greenways as a bridge between the natural and built environment. Some critics focus on Frederick Law Olmsted, Jr.'s commitment to "scenery," not recognizing his work as ecological planning.³⁰ Reduction of Olmsted, Jr.'s work to mere scenic design fails to acknowledge that the programmatic element of "scenery" is a component of ecological planning. For instance, a 2000 report by San Francisco Trust for Public Land, *Building Green Infrastructure: Land Conservation as a Watershed Protection Strategy*, noted in recent case studies in Austin, Texas and New Jersey that viewsheds of historic land use were incorporated into watershed plans in order to preserve the rural character of the region. Preservation of scenery was an additional benefit to recreation, flood control, and preservation of waterlands and forest habitats through land conservation.³¹ Additionally, Benedict and McMahan point out, "In the past five to ten years, there has been a renewed interest in landscape scale planning and in making linkages between ecological services and community needs. Increasingly,

³⁰ See Marguerite S. Schaffer, "Scenery as an Asset," 2001.

³¹ Trust for Public Land, *Building Green Infrastructure: Land Conservation as a Watershed Protection Strategy*, ed. William Poole (San Francisco: Trust for Public Land, The SF Trust for Public Lands, 2000), 31.

localities are recognizing that creating livable and healthy communities requires the conservation and restoration of healthy forests, accessible open space, and connected landscapes in order to provide for clean air, clean water, public fitness, wildlife diversity and aesthetic benefits, such as scenic views and natural beauty.”³²

In Los Angeles, the Olmsted Brothers borrowed ideas from successful projects in Boston and Westchester County. Like these former projects, problems such as flooding, were proposed to be solved *with* the design. Regions were unified by green spaces, and the protection of the rivers through wide easements allowed waterways to maintain their course and moved people out of danger from flooding. Los Angeles, however, was a more challenging site from East Coast examples. Here the Olmsted Brothers worked with a significantly different climate, largely dry rivers, and a wider range of ecosystems.

Los Angeles had cultural challenges as well. The wide flat plain and a population that relied on its automobiles had supported rampant development for a wide spread succession of cities. The warm climate allowed Angelenos to spend much time in outdoor recreation, but they usually needed their car to get there. From as early as the 1960s, Los Angeles experienced major air pollution. The mountains along the north and eastern edge of Los Angeles trap air pollution blown by ocean winds, creating massive problems in the inland valleys. Like most planners at the time, though, Olmsted, Jr. did not anticipate how large Los Angeles would become over the 20th century. The extensive use of automobile roadways, proposed by Frederick Law Olmsted, Jr. and others later developed in Los Angeles, contributed to urban sprawl and pollution seen today.

The design proposed in *Parks, Playgrounds and Beaches* offers financial lessons as well. The cost of building this project seemed expensive at the time, but it was intended to be paid out over the course of 50 years or more. Blended with infrastructure needs, the costs could have been shared with other organizations. Expenses later incurred by the county for flood control and road construction could have helped pay for this project; its expense was actually quite typical had the Citizens’ Committee studied the cost of other major metropolitan master plans.

Noted early in *Parks, Playgrounds and Beaches* was a discussion of the city’s demographics. At the time, 65% of the population was middle to low income and the report argued that these families should be given first consideration for park building.

³² As quoted by Firelock, *Green Infrastructure*, 3.

Those who lived in apartments or hotels were not advantaged with yards or access to private clubs for recreation. Existing open space in low density locales, the report argued, should not have precluded preservation for outdoor recreation. Proposed hybrid school grounds-community centers were not based on socio-economics, but provided locations for people of all ages to enjoy indoor and outdoor activities. The park and parkway plan was not mere landscape decoration, but a social necessity and economically achievable.

While working with natural systems in the region was the hallmark of the Los Angeles design, one can envision its outcome by studying built projects such as Palos Verdes and Olmsted Brothers' parkways and park systems designed elsewhere in the United States. The Los Angeles design, however, has some shortcomings which might be attributed to lack of a codified method of watershed management. For example, Olmsted, Jr. did not seem to appreciate the ecological value of wetlands' ability to clean pollutants as stormwater filter, and his advocacy for groins, or built elements in the ocean for shore protection, are now considered poor beach management. However, in the context of the era, these were best management practices and knowledge. A close reading of *Parks, Playgrounds and Beaches* can be interpreted as an early approach to watershed management through Olmsted, Jr.'s maintenance of natural hydrology, protection of the river and native vegetation, as well as open space reservations.

It was not until the 1930s that regional watershed design was successfully implemented in the United States. David E. Lilienthal writes that the Tennessee Valley Authority enacted by President Franklin Delano Roosevelt in 1933 saw the environment of an entire region reconstructed as a unit in the public interest. The Tennessee Valley Authority managed flood control, soil erosion, afforestation, marginal lands eliminated from agricultural use, as well as distribution and diversification of industry. According to Lilienthal, the region included:

The waters, the land, and the forests together, a 'seamless web' of which one cannot be touched without affecting every other strand for good or ill...In short, this power development...[led] logically to national planning for a complete river watershed involving many states and the future lives and welfare of millions...[along with] legislation to create a Tennessee Valley Authority—a corporation clothed with the power of government but possessed of the

flexibility and initiative of a private enterprise....Many hard lessons have taught us the human waste that results from lack of planning.³³

There have been many arguments for why the Los Angeles proposal was not built. Hise and Deverell argue it was politically rejected by the Citizens' Committee. Richard Longstreth notes this committee's lack of planning foresight.³⁴ Terrence Young argues its planning language was not responsive to popular marketing, while others argue it was the high cost of the project. What is not mentioned, however, is the politically charged issues of eminent domain and private property rights in a city that favored individual freedom over long-term community benefit. Throughout the report, Olmsted, Jr. cited specific private properties that should be taken by eminent domain for park building and clearly this report, if published and available to the public, would have been ripe for instant lawsuits.

The parkways and park system initially had wide political and economic support at the highest levels. Financing major infrastructure was dealt the final blow when the Depression hit the West Coast in 1931. Jeremiah Axelrod writes that the project's greatest advocate, Hugh Pomeroy, quit the Regional Planning Commission in order to lobby for the Olmsted park plan. Despite Pomeroy's political influence, he, too, could not get this project approved and in the wake of its failure, resigned the committee in the early 1930s to become a private consultant.³⁵ The political and economic timing of *Parks, Playgrounds and Beaches* might explain why the Olmsted firm's East Coast work has had more of an influence than their work in the West.

The Olmsted plan was to strictly limit development in the 50-year floodplain. Mike Davis writes that with the Army Corps of Engineers' paving the river, it allowed for significant industrial development within the previous floodplain. Davis states, "The support for this approach was first organized and financed by...Paul Shoup of the Southern Pacific Railroad. Shoup's so-called Flood Control Committee portrayed the river as an apocalyptic threat to the city's 'humble homebuilders.'"³⁶ Davis concluded that the "Los Angeles River—the defining landscape of the nineteenth-century city—was sacrificed for the sake of emergency relief work, the preservation of industrial land values, and a

³³ David Lilienthal, *TVA: Democracy on the March* (New York: Harper & Row), 1944, 132-133.

³⁴ See Longstreth, *City Center to Regional Mall*, 1998.

³⁵ See Axelrod, *Inventing Autopia*, 2009.

³⁶ Davis, *Ecology of Fear*, 69.

temporary abatement of the flood problem.”³⁷ The encapsulation of design for a semi-arid region was lost to a great extent for the next 100 years.

PROJECT REVISITED, 1941 - 1945

It was over a decade since the completion of the 1930 report, yet Frederick Law Olmsted, Jr.’s ideas were still of value as experts helped Los Angeles envision the needs of the quickly growing metropolis. Edited by George W. Robbins and Bartholomew’s protégé L. Deming Tilton in 1941, *Los Angeles: Preface to Master Plan* revisited many of the design aspirations of *Parks, Playgrounds and Beaches* which in many ways had also been a preface to a master plan. Tilton wrote that master plans “bring into reality communities that will make the greatest possible contributions to the art of living.” He noted that the limitations of planning are keen when focused on individual success versus the more foresighted group or community welfare, when one is “able to see the whole of a vast dynamic urban organism and to understand its complex functions.”³⁸ Tilton listed the elements of a master plan: conservation of natural resources or assets; land utilization; recreation; streets and highways; transportation; transit; public services; public buildings; community design; and housing. City design involved a wide range of discovery and the chapters in the 1941 report, written by noted experts, ranged in topic from water problems, to streets, transport to recreational facilities. The report ended with economic implications of metropolitan planning and its social significance. Throughout the report, it echoed Olmsted, Jr.’s remonstrance for Los Angeles. Conservation of natural resources were assets and included beaches, water supplies, fish, trees, and scenery. Land utilization would need to ensure desirable use of private land, examine patterns of zoning so that flood zoning could help manage proper development. Recreation, Tilton noted, should not only include playgrounds and parks, but pleasure drives. “Streets are worth of as much thought as a cathedral which is to endure for centuries. They should be planned with a far-sighted vision of the future.”³⁹

³⁷ Davis, *Ecology of Fear*, 69.

³⁸ L. Deming Tilton, “The Master Plan,” *Los Angeles: Preface to a Master Plan*, ed. George Robbins and L. Deming Tilton (Los Angeles: The Pacific Southwest Academy, 1941), 253.

³⁹ Tilton, “The Master Plan,” 254, 260.

George Hjelte added in his chapter on “Facilities for Recreation,” that Los Angeles needed three types of landscapes: beaches, large parks and connecting parkways, and lastly, remote mountain, desert and forest areas, what Olmsted, Jr. would have called reservations. Hjelte argued that beaches be maintained as a unit: ocean, tidelands, shoreline and scenic views. Perhaps the beach value, he offered, was so important that these landscapes should be placed under Federal government protection as National Parks. A master plan should protect the beaches from erosion as well as the negative environmental effect of flood control measures that had been implemented along the streams, reducing necessary rock particles to build sand along beaches. Hjelte’s ecological correctives were noted under “recreation.” Large parks and parkways, he concluded, should relate to highway building and be “park-like” in order “not to detract from the pleasure of traveling” with the additional benefit of screening industrial development and dense residential areas of the city.⁴⁰

Regarding the ongoing challenge of water, “Water Problems of the Metropolitan Area,” was written by Samuel Morris, a civil engineering professor and Dean at Stanford University. Reiterating Olmsted, Jr.’s watershed plan, Morris noted that there had been failure to recognize that changes along the drainage areas and along water courses affected streams and ocean beaches. Brush and vegetation on mountains reduced erosion and kept cleaner water in streams. By 1941, the watershed had lost drainage areas, spreading grounds were needed in the washes, and without proper flood control he estimated that damages over the next fifty years would exceed \$257,000,000. The city of Los Angeles had not secured wide right-of-ways to provide for flood zoning, and the channelization of the rivers had reduced the groundwater storage capacities in the San Fernando Valley, San Gabriel Valley, Upper Santa Ana Valley and coastal plain which had had the capacity to hold 13,000,000 acre feet of water if natural seepage had been allowed. The complexity of water issues was compounded by a lack of coordinated agencies, he argued.⁴¹ Olmsted, Jr.’s multifunctional-multijurisdictional aspirations for Los Angeles would have melded

⁴⁰ See George Hjelte, “Facilities for Recreation,” *Los Angeles: Preface to a Master Plan*, eds. George Robbins and L. Deming Tilton (Los Angeles: The Pacific Southwest Academy, 1941), 213-226.

⁴¹ See Samuel Morris, “Water Problems of the Metropolitan Area,” *Los Angeles: Preface to a Master Plan*, eds. George Robbins and L. Deming Tilton (Los Angeles: The Pacific Southwest Academy, 1941), 71-90.

resolutions, coordinated policy, and perhaps been equal in expense as the aggregation of costs that Los Angeles would undergo for flood mitigation of little aesthetic value.

This thesis cited the scientific influence of Charles Eliot as principal in Olmsted, Olmsted & Eliot. It closes the circle with his nephew, Charles W. Eliot II, also a landscape architect, who tried once more to build the Los Angeles plan in 1945 upon Olmstedian principles. Like his uncle before him, Charles W. Eliot II blended ecological understanding of a region into an artful use within landscape architecture practice. The John Randolph Haynes and Dora Haynes Foundation was created in Los Angeles in 1926 to further social and political reform. Tom Sitton writes that “regional planning, with its emphasis on managing changes to the natural and human-built environments, fit neatly into John and Dora Haynes’ conception of a rational approach to solving some of the social ills facing metropolitan and surroundings areas” and were staunch supporters of Gordon Whitnall and his efforts to establish a city planning program in Los Angeles.⁴² The Haynes Foundation was like another philanthropic foundation, the Russell Sage Foundation, which believed that “the physical environment exerted a profound influence on social life.” The latter organization worked with the Olmsted Brothers to design Forest Hills Gardens in Queens, New York and was a benefactor for the *Regional Plan of New York and its Environs*.⁴³ As part of the Pacific Southwest Academy of Political and Social Science, the Haynes Foundation hired L. Deming Tilton in 1939 as the foundation’s counselor on planning and financed *Los Angeles: Preface to a Master Plan*. When the foundation decided to shift from regional planning to a more expansive think tank, the trustees hired Charles W. Eliot II as Executive Director. Eliot re-organized projects into four units, including economics, governmental, social sciences, and most importantly for this argument, physical development primarily concerned with environmental conservation.

According to Sitton, Los Angeles experienced massive environmental degradation to its natural setting due to war efforts during World War II. Necessary industrial development and defense-related industries dumped their poisonous waste into waterways, and the noxious chemicals from these plants blanketed the region in smog. Oil drilling increased with the expanded need for oil derricks which lined the ocean and were

⁴² Tom Sitton, “Private Sector Planning for the Environment,” *Land of Sunshine: An Environmental History of Metropolitan Los Angeles*, eds. William Deverell and Greg Hise (Pittsburgh: University of Pittsburgh, 2005), 154.

⁴³ Sitton, “Private Sector,” 155.

added to neighborhoods. Faulty breakwater construction required loads of sand to backfill against erosion. A continued influx of new residents to Los Angeles overtaxed the older sewer system, resulting in untreated sewage which flowed into Santa Monica Bay and the beaches had to be quarantined. It was during this period under Eliot's guidance that the Haynes Foundation published *Plans and Actions for the Development of the Los Angeles Metropolitan Coastline* to further develop specific recommendations from Tilton's *Preface to a Master Plan*.⁴⁴ By 1945, Eliot, Donald F. Griffin, and other Haynes staff members wrote *Report of the Citizens Committee on Parks, Beaches and Recreational Facilities*, an addendum to the 1930 Olmsted, Jr. plan.⁴⁵

Much like the *Preface to a Master Plan*, Eliot's addendum reiterated once more the value of Olmsted, Jr.'s ideas for Los Angeles. While the 1920s did not include the level of environmental degradation, Olmsted, Jr.'s ideas still were valid. Eliot et al. advocated for public acquisition of the coastline and adjoining uplands as shores and beaches belonged to the public. Their 1945 report was sent to the Olmsted firm in October 1945 and the firm filed it under job correspondence for *Report of State Parks Survey of California*. While it might seem surprising that this report was filed under that job number as opposed to *Parks, Playgrounds and Beaches*, the 1945 report wrote that Haynes Foundation favored action by the city and county to "title beach properties to the State Park and Beach Commission as matching contributions for state acquisition of other beaches within the County."⁴⁶

Eliot's report documented that in a revisit of the 1930 Olmsted-Bartholomew Plan that "some concern has been expressed over the expense of improving parks and recreation areas."⁴⁷ The Committee recommended that leaving park reservations in their natural state would reduce costs with the only fees needed for travel by access roads or trails, fire protection, and sanitation facilities. Open space reservations in the hills and mountains were advocated for immediate acquisition in Santa Monica Mountains, Palos Verdes Hills, Baldwin Hills, Montebello, Puente and San Rafael Hills, and Verdugo Mountains. In the valleys, recreational areas should take advantage of still and running waters as the report argued for multiple use of investments in reservoirs, flood control

⁴⁴ See Donald F. Griffin, *Plans and Action for the Development of the Los Angeles Metropolitan Coastline* (Los Angeles: Haynes Foundation, 1943).

⁴⁵ See Charles Eliot II and Donald F. Griffin, *Report of the Citizens Committee on Parks, Beaches and Recreational Facilities* (Los Angeles: Haynes Foundation, 1945).

⁴⁶ Eliot and Griffin, *Report of the Citizens Committee*, 5.

⁴⁷ Eliot and Griffin, *Report of the Citizens Committee*, 4.

works, and other public improvement. Park developments along and within the waterways afforded recreational opportunities for swimming, fishing, and boating in Bixby Slough, Whittier Narrows, and the newly named Dominguez Slough in Gardena. The washes of the San Fernando Valley and areas ringing Sepulveda, Hanson, and Santa Fe Dams also offered amenities near water facilities.

Parkways were brought back in this report, in which pleasureways, or connecting routes, would bridge parks or scenic features, providing protection of views over the city and valleys. The parkways' maximum use, however, would come from flood control-freeway design in multipurpose projects along stream valleys. The report concluded with recommendations for ways to finance such a park system. Example after example of exemplar projects were noted throughout the United States, from Boston, Washington, D.C., to the East Bay Regional Park District, though without specific attribution to the Olmsted firm. The economic plans espoused in *Parks, Beaches and Recreational Facilities* financed construction through park bonds and funded a parks commission, with authority of eminent domain for acquisition of both parks and parkways, which he reminded, was a common practice across the country.

Eliot wrote one more damning shoreline development report called *Waterlines: Key to Development in Metropolitan Los Angeles* in 1946. "Water is life" he began. In the "desert" of Los Angeles "the problems are too little and too much." Again, he wrote that Los Angeles must seek multiple use of projects along the natural location of waterlines to maximize value for groundwater supplies, flood control, parkways and railway, recreational facilities featuring water, sewers and floodplain zoning for private use. The marketing of this report was an updated, more populace-friendly version, of the 1930 proposal with graphic maps and photos. Eliot warned of the cycles of flooding with charts of increased costs from flood control and property loss. Illustrating a channeled waterway, he noted that "paved channels have been constructed to increase the velocity of flow and thus the capacity of streams to carry flood flows within their banks. Debate has often grown hot over the comparative merits of a policy of rushing water to the sea as contrasted to a policy of promoting seepage even at the risk of some flooding."⁴⁸

By 1945, flood control costs funded by the Federal government, County Flood Control District, and State of California were in excess of \$420,000,000 with Los Angeles

⁴⁸ Charles W. Eliot, *Waterlines: Key to Development of Metropolitan Los Angeles* (Los Angeles: Haynes Foundation, 1946), 17.

County alone responsible for \$72,000,000 in outlay and maintenance. One freeway, the Arroyo Seco Parkway, from Los Angeles to Pasadena, followed the flood control channel in an aesthetic example of a park-like surrounding. The hazards of flooding, he wrote, have “prevented valuable improvement—hence rights of way less costly. Combined action on land acquisition for freeways and flood control can void the public paying double damages.”⁴⁹ Spreading grounds were needed while increased pumped water from wells had to carefully avoid salt water infiltration of groundwater. A large two-page spread highlighted the value of Dominguez Laguna (or Gardena Slough), and highlighted all of Olmsted, Jr.’s features in this design. It was a natural lake, flood hazard area, floodplain zoning, flood control project, freeway project, and park project. (Figure 8.13, Figure 8.14 and Figure 8.15). Proper water management in a city with too little or too much had rich opportunity for recreational use—on, in, or beside—water and it would require coordinated policy to truly manage stormwater, reforestation, and watershed improvements in Los Angeles County.

The 1930 *Parks, Playgrounds and Beaches* addressed watershed planning well in advance of this period, and 19th century Olmsted principal Charles Eliot would have been proud of the advancement of scientific approaches in landscape architecture by Frederick Law Olmsted, Jr. *Parks, Playgrounds and Beaches* was a watershed plan that captured all the Olmsted firm’s previous ideas and managed them at a scale and scope not previously developed in Los Angeles. The proposal focused on both nature and culture, bridging a partnership with nature while still intervening for human use. This most regional project in Los Angeles, it foresaw the looming ecological issues ahead and had accounted for them, solving them with design. Socially significant, the plan added green space throughout the county in ways that Los Angeles residents could interact in these landscapes in recreation, contemplation, and scenic beauty of the regional landscape. The design created new public spaces, across socio-economics, and all demographics.

⁴⁹ Eliot, *Waterlines*, 21.

DOMINGUEZ LAGUNA •

AN EXAMPLE OF MULTIPLE PURPOSE DEVELOPMENT ALONG WATERLINES

A NATURAL LAKE covering 5½ square miles, south and southeast of Gardena with wooded valley upstream to Alondra County Park.

A FLOOD HAZARD AREA around Dominguez Laguna and so-called Johnson Lake above Alondra Park at Rosecrans and Western Avenues.

FLOOD PLAIN ZONING (County Ordinance 3655—July 30, 1940) bounds a flood hazard area and prohibits buildings "designed for human habitation" in the area below the 15.5' contour at Dominguez or below the 47.5' contour at Johnson Lake. The assessed values of private property within the ordinance boundary is

Dominguez	2906 acres	—	\$528,784
Johnson	880 acres	—	274,480
	3786 acres at		\$803,264

FLOOD CONTROL PROJECT is authorized in two stages for which the 1940 estimates were—

Stage 1—to safeguard areas above 47.5' in Johnson Lake and above 15.5' in Dominguez . . .	\$1,942,700
Stage 2—to eliminate flood danger in Johnson Lake, to safeguard areas above 11.0' in Dominguez . . .	5,645,300

For channels through 11.5 miles of valley	\$7,588,000
These estimates have recently been revised upward to	\$9,000,000

FREEWAY PROJECTS involve some 7 miles of construction in this area or 202 acres within ordinance boundary estimated to cost \$100,000, plus construction.

PARK PROJECTS have been frequently proposed in this area: Olmsted Brothers, 1926

Treanor Committee—Olmsted-Bartholemew Report, 1930	Los Angeles City Planning Commission, 1945
This latest project would cover 1925 acres assessed at	\$ 226,102

If the whole area within the ordinance boundary were acquired and developed for park purposes and allowed to flood occasionally, these figures indicate that the people would SAVE OVER \$6,000,000 and also have a much needed larger water-featured park.

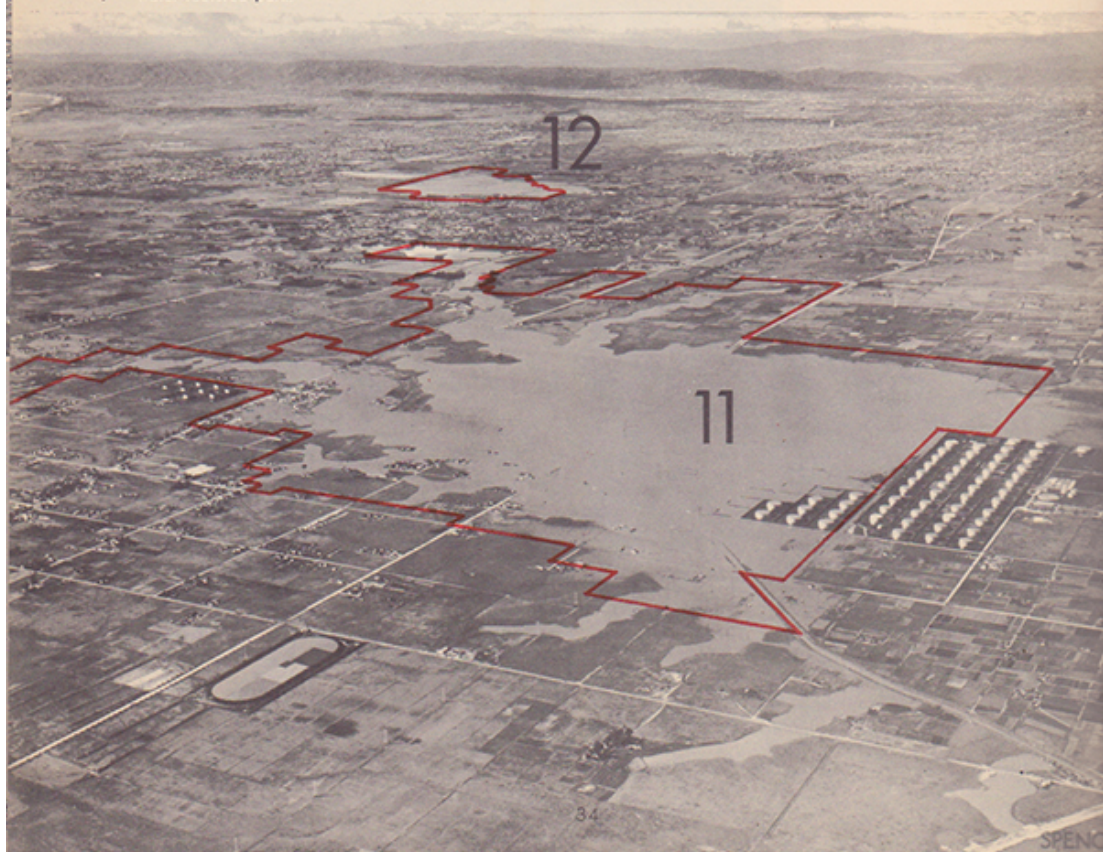


Figure 8.13: Dominguez Laguna: An Example of Multiple Purpose Development along Waterlines, 1946. Charles Eliot II recommended that this slough (formerly Gardena Slough) be designed per Frederick Law Olmsted, Jr.'s plan of a multifunctional park space. Credit: The Haynes Foundation

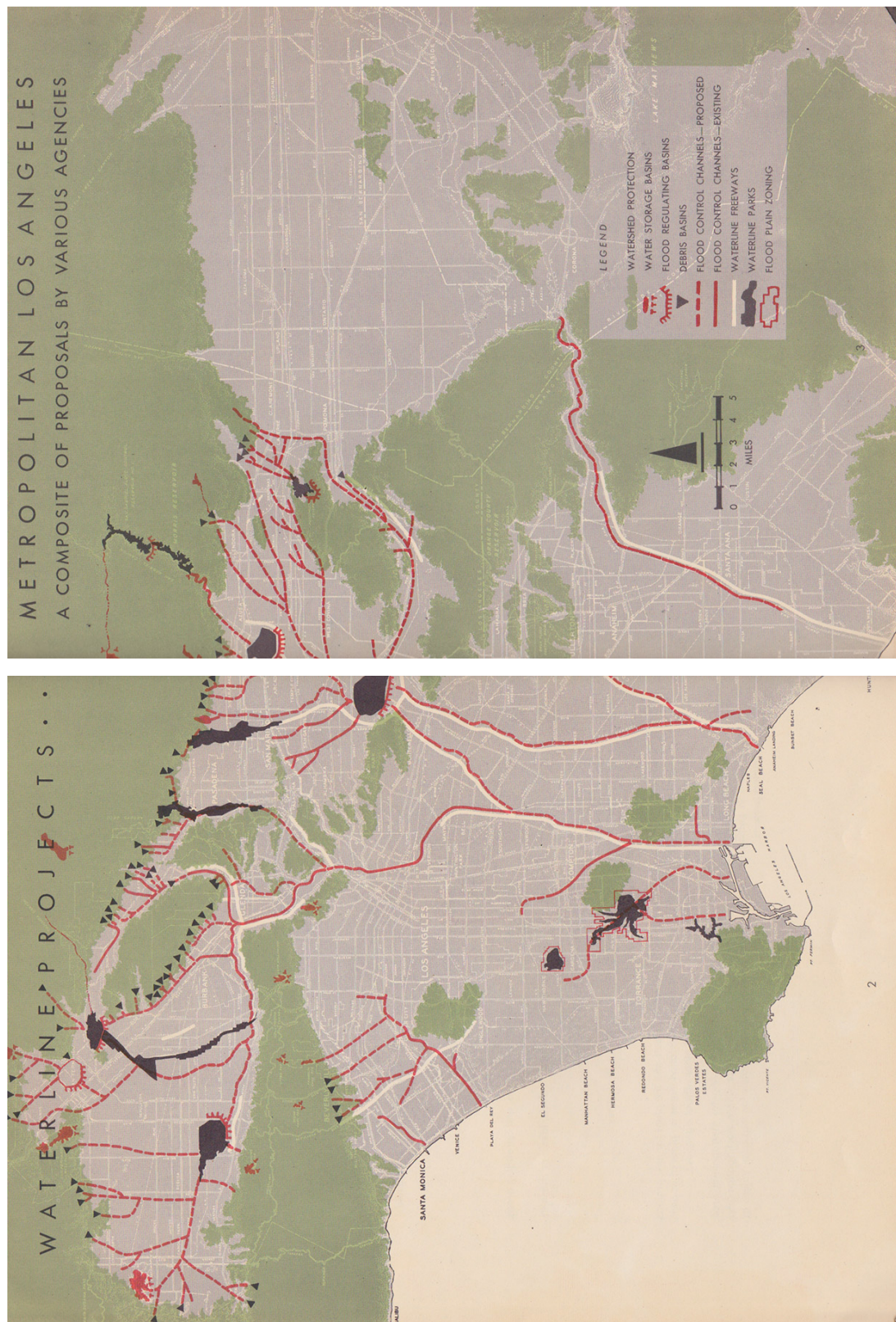
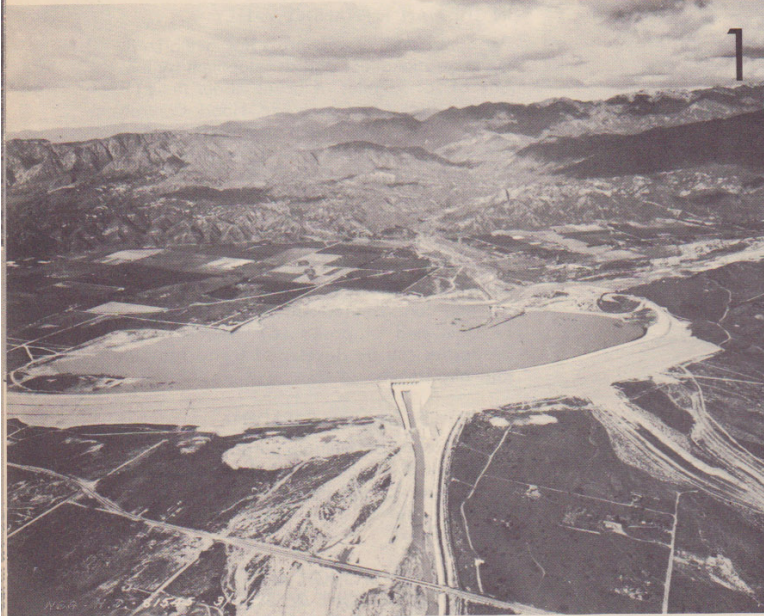


Figure 8.14: Waterline Projects in Metropolitan Los Angeles, 1946. Examples of water projects underway in Los Angeles in Eliot's *Waterlines* publication. Credit: The Haynes Foundation

SAN FERNANDO

The Los Angeles City Park Department is developing plans for golf and other park uses of the areas about the Hansen and Sepulveda Dams constructed by the War Department.

HANSEN FLOOD CONTROL DAM



The North Hollywood Parkway is planned to follow along the Washes of San Fernando Valley and to pass through Victory Park and North Hollywood Park.

3

PLAN FOR NORTH HOLLYWOOD PARKWAY
ALONG WASHES OF SAN FERNANDO VALLEY

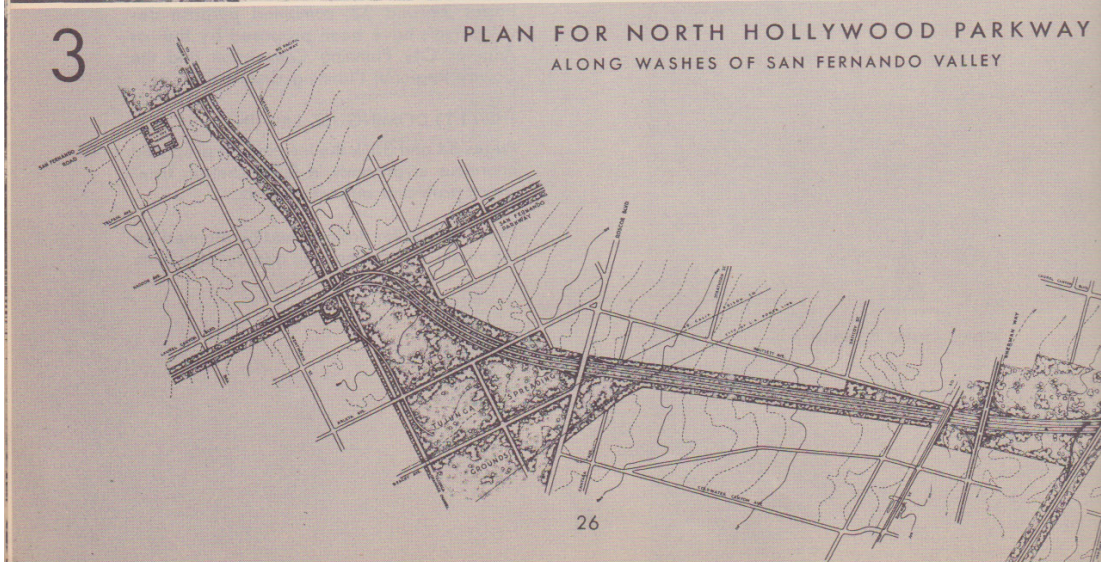


Figure 8.15: Plan for North Hollywood Parkway, 1946. Eliot's *Waterlines* publication offered blended infrastructure design of golf course and dams, and parkways along the rivers to manage stormwater. Credit: The Haynes Foundation

CHAPTER SUMMARY

Parks, Playgrounds and Beaches for the Los Angeles Region is a report which offers new discourse when analyzed as a watershed management plan. Amassed over 1500 square miles, Frederick Law Olmsted, Jr. intended this regional park plan to connect existing and proposed green spaces, weaving them along water resources in multiplicity of function. Parkways, parks, and open space reservations played roles in protection of the watershed, keeping the natural hydrologic patterns largely intact. The proposal anticipated modern urban theory in which the landscape is the driver for form and response, a mediation of nature-culture, and an acknowledgment of ecological process in interventions that provide public spaces. Prescient and sophisticated, Olmsted, Jr.'s ideas remained of value as the project was revisited by urban planner L. Deming Tilton in 1941 and once again by landscape architect Charles Eliot II in 1945 - 1946.

Finally, this chapter culminates with Frederick Law Olmsted, Jr.'s understanding of the Los Angeles basin reflected in a progressively scalar range to a park system arranged around the watersheds of Los Angeles County. This park and parkway proposal reflected Frederick Law Olmsted, Jr.'s broad regional understanding of the range of ecosystems, the behavior of the watershed, and a design responsive to these ecological conditions, creating a culmination of previous designs, and an aggregation of professional work from 1903 - 1930 into one proposal.

CHAPTER 9

DISCUSSION AND CONCLUSIONS

We cannot command nature except by obeying her.

Francis Bacon, c. 1610

Ecological planning relies on a keen awareness of relationships between biophysical and social processes, then uses this knowledge for decision making in accommodating for human needs. The value of this planning process allows for design intervention while also ensuring a sustained use of the landscape, with these insights blending skill and artistry into place-making. During the early 20th century, ecological principles and methodology were not fully established but, rather, it was a time of experimentation and exploration, with the 1920s becoming a period of more prescribed ecological knowledge. The Olmsted Brothers' development of community designs, parkways, open space management, and watershed planning in Los Angeles were important contributions to the evolution of American landscape architecture as the firm used designs to solve ecological problems in the context of the era's cultural and political climate. This thesis challenges current discourse on establishment of ecological design largely in the 1960s, presenting evidence that the Olmsted Brothers' ecological work in the 1920s predated many modern ecological theories and applications in the practice of landscape architecture. Moreover, though nearly 100 years old, the Olmsted Brothers' design approaches reveal innovative solutions and continue to have relevance in the 21st century.

DISCUSSION OF RESULTS IN CASE STUDY PROJECTS

As the first broad investigation of Olmsted Brothers' landscapes in Southern California, this critical analysis of firm projects uncovered an early form of ecological design and planning, a period before its methodology became a normative component of modern landscape architecture practice. Examined through a lens of 21st century terminology and landscape architecture practice, this study also provides insights for contemporary concerns such as water management, sustainable urban planning, and examples of hybridized use and function of landscape agendas. Case studies were chronologically ordered to discern the way the Olmsted Brothers shifted their Western practice over the course of 16 years to accommodate ecological conditions in semi-arid Southern California. From Palos Verdes to the Los Angeles park and parkway plan, this thesis explored the evolution of the Olmsted Brothers' work, with overarching themes providing a systematic framework to study their design from a community to watershed scale.

The research began with the first two questions: In developing ecologically responsive designs, how did the Olmsted Brothers' work fit within the ecological knowledge as well as the cultural and political context of the era? Furthermore, how could job correspondence from their Los Angeles County projects, as well as period imagery and plans from their built and unbuilt projects, provide further evidence of ecological planning within their regional designs? This discussion highlights their central design approaches and speaks to the results from the case studies while also offering a critique of some the firm's choices that were less aligned with modern ecological planning.

While the Olmsted Brothers had initial design forays in Southern California from 1903 - 1911, the first case study of the Palos Verdes project presented the greatest potential for the creation of an ideal Southern California community design—as interpreted by the Olmsted Brothers—a superb opportunity as the site was largely free of existing infrastructure. In-depth site research was integral to the Olmsted Brothers' approach to any new project. The firm's initial site research focused on its biophysical elements: climate, topography, soils, vegetation adaptation. A study of proposed land use elsewhere would marry their design to the regional context. Topographical studies guided road layout conforming to the site's natural contours, which reduced the need for cut and fill. Topography also structured the unusual lot layouts that required home owners to respond to each property's grade, views, and existing vegetation. Once research on hydrologic patterns was established, the Olmsted Brothers maintained them largely *in situ*. While not

unusual for the firm, the management of stormwater run-off at Palos Verdes, in particular, prefigured later strategies of ecological planning and design and speaks to the practice of landscape architecture at the time. The value of working with the existing hydrology was that natural drainage channels were maintained and stormwater flowed into ravines, where it infiltrated without eroding the landscape. The Olmsted firm realized that in working with the existing hydrology, rather than significant engineering of water, not only were natural systems maintained, but the practical application was that this was a less expensive way of building.

Working with plant expert Theodore Payne and nurseryman Louis Horner, native and hardy plants were propagated in Palos Verdes to ensure microclimate compatibility, with an on-site nursery established for planting the new community. As previously discussed, there were some practitioners, such as Kate Session of San Diego, whose work focused on native plants, but this was not common. From the late 19th century, use of ornamental plants dominated most landscapes. Copious amounts of water allowed a large range of plants to succeed, especially in Southern California with its benign climate and nearly non-existent winter. Eschewing these more typical practices, the Olmsted firm focused on regionally appropriate plants. In Palos Verdes, low-water plants found further specificity as the Olmsted Brothers plant lists were generated to be particular to landscapes, such as plantings best adapted to ravines or hillsides.

Because of the use of regionally appropriate plants and other design strategies, Palos Verdes was principally a non-irrigated landscape, an unusual practice even in the 1920s. By extension, the firm sought a new type of park typology, initially in their unbuilt proposal for San Diego, but effected in Palos Verdes in a design that focused on a native and drought-tolerant plant palette while reducing the lawn in response to semi-arid conditions. Creating parks with limited lawn was also an unusual practice at this time as the perception of a “park” was derived from English prototypes. It is interesting to note that the new typology initially attempted in San Diego at the Panama-California Exposition, when completed by others who didn’t share the value of regional design, reverted to the heavy use of lawns—regardless of the climate. In Palos Verdes, however, lawns were based on recreational scale rather than a default—and unsustainable—choice.

Other regional designs were found in architecture and materiality, employed as California Architecture and profuse use of local Palos Verdes stone, in a response to the Mediterranean climate and setting, and in furtherance of creating a sense of place and

regional character. While not architects, the Olmsted firm played a role in the siting of buildings, and offered critique to architectural designs which missed opportunities to work with the site. California Architecture was not simply aesthetic as the design more carefully partnered with the ecological conditions of the site. As influenced by their East Coast project in Forest Hills Gardens and applied again in their Torrance project, wind studies were embedded into the design process in order to best utilize the benefits of natural cooling and mitigation of pollution. Regional materials, such as Palos Verdes stone, reflected the sense of place, but pragmatically the material was easily quarried from the site.

As seen in Malaga Cove, land use in Palos Verdes' individual villages was also self-sustaining with a commercial district, residential housing, schools, a library, recreational amenities and parks, all within walking distance. Planning included a careful allocation of open space which afforded a variety of functional, aesthetic, and social purposes. Rather than lining the coastal cliffs with prime lots, Olmsted, Jr. and his associates argued for setting aside these areas so that the whole community could enjoy the views. Land use would also look to the Mediterranean in a truly American adaptation, borrowing spatially from models such as plazas, for example, yet modifying their function to parking lots to meet American automobility needs. These 1920s planning features provided an early ecological framework for current community designs. In 1927, planner John Nolen wrote that Palos Verdes was the "complete and perfected plan of community development" due to its response to key design features. Palos Verdes' geographic location related to other regional plans and its design responded to topography in transportation and water systems. Land use had specialized purpose: the community was planned for a population size of optimum use, with preplanning for infrastructure. Public buildings and schools were carefully grouped with particular consideration for housing and lot sizes. And lastly, open space was set aside.¹

In retrospect, the most valuable aspect of the Olmsted Brothers' design at Palos Verdes was the ecological design of the bones or framework of the community, the hidden elements of a design, and those least likely to be changed later. This would include initial site grading and road layouts that omitted most storm drains, instead using native plants to capture stormwater and minimize erosion. In a progressive design method at the time,

¹ Nolen, *New Towns for Old*, 137.

allocated open space also provided areas without development for water infiltration. More typical would have been further development of the landscape for greatest profitability. The Olmsted firm, however, was able to convince Frank Vanderlip to set aside these open spaces as public land in appreciation of the natural setting and its systems.

While ecologically robust in many ways, this community design is not without social critique. Covenant restrictions chiefly developed by planner Charles Cheney forbade non-Caucasians from living in this community, and spoke to the endemic racism of the era. Other restrictions on the square footage and cost of new residential construction contributed to the perception of the Olmsted Brothers as elitist designers, whose focus was on the affluent owner and developer, which in many ways is an accurate assessment of the firm's community and private estate designs for which the firm is best known. Though the covenant restrictions were very specific on architectural limitations, the planning document was less specific on maintaining the ecological components of the original design for the landscape. For example, the document failed to limit water use to maintain the template of small-scale water use in the water management plans established by the Olmsted firm. During the 1940s – 1950s, popular lifestyle journals like *Sunset* magazine and influential California landscape architects like Thomas Church advocated a return to front lawns, an influence readily seen in the development of Palos Verdes during this period in villages like Lunada Bay.

The importance of the automobile created a significant revolution in design starting in the early 20th century. In the second case study, the Olmsted firm capitalized on this change and used infrastructure planning to respond to the ecological, cultural, and political context with their Los Angeles designs. As ecological designs, the Olmsted Brothers' parkway plans in the 1920s were greenway projects, notable in that they offered new examples for multifunctional landscape architecture in semi-arid climates: aesthetic designs during drought, but also effective flood management when necessary. The 19th century Olmstedian parkway evolved to designs intended to balance the specific ecological and cultural issues of Los Angeles as demonstrated in the Hollywood-Palos Verdes Parkway, its connector, the Angeles-Mesa Parkway, as well as other parkways proposed in *Parks, Playgrounds and Beaches*. Frederick Law Olmsted, Jr. intended to use these parkway designs to give coherence to Los Angeles, a city built without a master plan. At the same time, the parkways also served many functions through a single design: the road was a park, a didactic urban and cultural element, and floodway to manage stormwater.

Although similar parkways were used in many previous Olmsted Brothers projects throughout the United States, roadways, which the firm called “pleasureway parks,” were proposed for Los Angeles in an interconnected regional parkway system. Analyzed through construction documents of the period, the planting of a pleasureway park revealed a scheme that was lush, highly colorful, and most importantly—drought-tolerant. In this way, the parkways as parks acted like stand-alone landscape features, with the regional character of Los Angeles reflected in the plant types, and exemplified the precious value of water in the region. The roadways would also showcase the county’s natural and cultural beauty. Routed along historic sites such as Pio Pico Adobe House, natural rock outcroppings in Simi Hills, and water features both built as reservoirs or natural, in rivers and the Pacific Ocean, all these elements highlighted the *genius loci* of Los Angeles per the Olmsted firm. These parkways united existing greenspaces—parks, playgrounds, cemeteries, hospital grounds, among a large list—into what one would today call, a complete green infrastructure plan. For the firm, these park and parkway systems brought a community’s noted natural beauty into constructive and necessary green spaces.

For this thesis argument, perhaps the most important feature of the parkways was the way in which they managed water. The parkways for Los Angeles County would ultimately provide a heuristic at a watershed-level scale and address both water shortages and water inundation. Purchase of lands prone to flooding, Olmsted, Jr. argued, would provide for both parks and flood-control. Control of the water edges also solved water conservation objectives, especially for Los Angeles, with the

opportunities for combining [flood control and water conservation], at little extra cost...along natural drainage lines...Such lands have to be acquired only once, yet would serve a double purpose—flood-control use and park use—not conflicting but positively beneficial to each other. Especially would this be true of the land acquired as a margin of safety; the open land skirting the chief flood control area which prudence would include in the purchase.²

In an example of a sociological sensitivity, wide rights-of-ways along the river edges protected human lives and property, but as an ecological design this feature also protected *the river* itself. With infrastructure located in the floodplain, Olmsted, Jr. believed it would be a relatively easy repair after inundation, certainly less expensive than buildings and

² Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 16.

other structures which had been carried downstream in large storm events. The ecological research initially developed in Palos Verdes was expanded into a regional design vocabulary in the parkways. Like the precedent Bronx River Parkway, the Olmsted firm attempted to solve an ecological problem, flooding from the major rivers in Los Angeles, *with* the design, a key argument in this study. Olmsted, Jr. analyzed the hydrological patterns and developed parkways that would protect against and mitigate inundation, though have constructive value during the predominantly dry periods as well.

In critique of the ecological aspects of this Olmsted proposal, the design of a parkway supposes that its use is largely for automobiles. From the *Major Traffic Street Plan* in 1924 which proposed to widen boulevards to alleviate traffic congestion, the inclusion of still more roadways in Los Angeles, rather than improved public transportation, would argue that the Olmsted firm contributed to the automobility focus in the development of Los Angeles during this period. This was perhaps symptomatic in an era of modernity and individualism. It would not be until the 1930s that some landscape architects moved away from a focus on cars to greater pedestrian circulation, such as the 1938 Los Angeles design of Baldwin Hills Village by Reginald D. Johnson, Clarence Stein, and Fred Barlow. Despite this critique, one of the important conclusions of this case study is that the Olmsted designs were innovative as ecological responses since parkways in the floodplain had no models at the time. Parkway designs elsewhere in the United States had predictable riverways for which the firm could plan. Not so with Los Angeles and its alternately dry and inundated river beds. Whether these landscapes would have actually worked, however, needs further hydrological study.

Parkways were not always located for best ecological purpose, but were influenced by political and economic rationalizations as well. A social analysis revealed that Olmsted, Jr. purposely located his expensive and elegant parkways in affluent neighborhoods, going around poor neighborhoods, excluding them from this beautiful park type and improvement of property values. In defending this position, Olmsted, Jr. was a pragmatist and wrote that property taxes on lower value homes could not support the expensive cost of parkways; rather, higher property taxes from more affluent neighborhoods at the time could finance parkways, providing a roadway for all to enjoy. For Olmsted, Jr. his concern was to provide green spaces for *all residents* in the community. Nonetheless, in critique it would appear that the Olmsted Brothers' design seemed less interested in supporting the urban poor than the 19th century values upon which the firm was originally established.

Economics seemed to be the more important factor than what was best for the less affluent residents.

The third case study, *Report of State Parks Survey of California*, provided a roadmap for open space management policy, conservation, and environmental design guidelines, expanding Olmsted, Jr.'s approaches to a state-wide scale. In this report, he advised that the Sacramento River and its tributaries were ideal candidates for state park acquisition and a model for other state park nominees. Like the Los Angeles pleasureway park designs, Frederick Law Olmsted, Jr. valued the multifunctional and multijurisdictional control of the Sacramento River for saving views, providing recreation, and preserving the flooded lowlands as natural parks. Land control was shared by a variety of governmental agencies who collectively supported these landscape amenities in open space management and through conservation. The function of open space, according to Olmsted, Jr., was to balance recreation and habitat, while showcasing the diversity of landscapes in the region. Olmsted, Jr. understood the necessary equilibrium of conservation and utilization of natural and constructed resources—from beaches and rivers, to highways and existing trails, to proposed open space. Bridging both preservation and conservation ideals of the time, his ideas proposed sustainable land management techniques, especially with regard to timbering (or logging), agriculture, and water. As discerned through his comprehensive research and investigation, optimal land management was not always through design as he redefined the economics of open space. The *value* of a property was not necessarily its *cost*. In a play on words, value extended to the simple enjoyment of scenery or maintenance of natural systems in undeveloped landscapes.

The Olmsted firm's job correspondence offered evidence of the process by which Olmsted, Jr. determined state park candidates and revealed a systematic method to measure landscape suitability. He wrote in a 1926 draft of the scope of work for the state parks survey that in order to preserve the natural beauty of California, "there is needed a clear, broad understanding of what the lands are, of their approximate classification according to special characteristics adapting them to the diverse special functions..., and their approximate extent and distribution within the State."³ Under Charles Eliot, the Olmsted firm had developed a mapping system to identify best land use as early as 1894, an influence acknowledged by Ian McHarg for his 1960s' overlay system. For the 1929 *State*

³ Olmsted, Jr., *State Parks Survey*, 11.

Park Survey, Olmsted, Jr. progressed Eliot's analysis from field studies and maps to a rational rating system of both qualitative and quantitative landscape data for which he weighed the value of each potential state park candidate, a system which predated McHarg's analytical process. The result of Olmsted, Jr.'s process was to find optimum use and determine the "value" of landscape elements to ensure protection and best utilization of resources.

Scenery, a word that connotes an aesthetic interpretation, actually had a scientific foundation for Olmsted, Jr. as he wrote in this survey that the "fundamental elements determining the characteristics of scenery are geologic": "the land forms, the soil and rocks, the water—the most significant criterion of landscape conditions which can be shown on a small scale map, in addition to streams and large bodies of water, and the distribution of the various types of natural vegetation."⁴ Submitted with his final report was a Scenic Resources map, or what he called a distribution of resources, which was an overlay map of national forests, regions by tree type, existing state parks, and major highways and railroads. Olmsted, Jr. had borrowed research data—Vegetation Type Maps—from the Forest Experiment Station at Berkeley, documents whose purpose had been to serve a variety of land management objectives including fire and flood control. The Forest Experiment Station data allowed Olmsted, Jr. to organize his vegetation overlays as landscape units, defined by their ecosystems. That is, in defining a unit by tree type, it factored a range of ecological criteria for which specific tree types thrive in response to conditions of site topography, precipitation, aspect, and soils. Therefore, vegetation and plant ecologies helped inform park locations in both quantitative justification as well as the qualitative experience. Olmsted, Jr.'s proposal did not divide the state by more typical cultural and political boundaries, but rather used a scientific method of mapping the state's different ecological conditions based on plant associations, pre-dating phytosociology practice in ecological planning. Not necessarily intending to be innovative, this process was developed by Olmsted, Jr. as having a rationale based on scientific evidence. It was a logical way of holistically evaluating sites.

Lastly, the *State Parks Survey* provided environmental design guidelines for open space management. Olmsted, Jr. challenged issues of private and public management of natural resources. While not condemning practices, he qualified those activities when they

⁴ Olmsted, Jr., *State Parks Survey*, 39.

wasted natural resources. Logging, for example, should be responsibly executed without removal of exceptional tree types like the ancient redwoods. Building alongside water resources required setbacks to preserve and allow for natural hydrologic function in streams, rivers, and beaches. Necessary roadways tested how to create circulation through state parks, maintain the parks' natural beauty, minimize environmental damage, while carefully siting private development and amenities within them. His land management legacy remains in place in California State Parks' mission: recreation is a balance of public access, preservation or conservation of sensitive ecologies, with anticipation for future land use change.

Balancing sociology and ecological design, equally significant was the issue of public and private financing. Frederick Law Olmsted, Jr.'s projects would have been expensive, but he felt that if they had multifunction, then financing could come from a variety of resources. He also advocated for sites which would match their purchase with private donation of land per the State Park law. Were the environmental policy ideas, therefore, a result of Olmsted, Jr.'s ecological study, or were they driven by his personal values? The answer is both: the state park survey blended ecological knowledge of the day with Olmsted, Jr. recommending policy to forward his personal agenda and values.

The fourth and final case study in this thesis was the watershed management proposal in *Parks, Playgrounds and Beaches for the Los Angeles Region*, with this report explaining one more facet of the Olmsted practice. It demonstrated the way Frederick Law Olmsted, Jr. employed regional planning at a watershed scale, organized around Los Angeles' natural resources in an early awareness of what today would be called watershed management. Garden cities of the 19th and early 20th century evolved in the 1920s to regional planning studies which aggregated knowledge and research to a previously unseen scale in ecological design. Planning by the Olmsted Brothers grew from design of 16,000 acres at Palos Verdes to 1500 square miles for the county of Los Angeles. Spread over 960,000 acres, Olmsted, Jr.'s 1930 design encompassed a watershed scale of ecological planning and was the largest single project undertaken by the firm in the Los Angeles area. It was at this latter scale that design would consider five watersheds to develop a comprehensive master plan for the landscape of Los Angeles. The early work in California pointed to water as the key problem; therefore, regional design response needed to work with the watershed as a unit. For this period in American landscape architecture, the

nature-culture typology was resolved in a highly sophisticated and sustainable urban design that bridged ecology and culture.

Once again water terminology and function was at the forefront as Olmsted, Jr. no longer defined parks through a 19th century Romantic and picturesque vision, but instead categorized the parks by land use and water resource: Shore Front Roads and Park areas; Large Upland Reservations; Large Drainage Basin Reservations; Narrow Drainage Basin Reservations; Connecting Parkways; and Enlargements of especially valuable lands. The park proposal was a watershed design, intended to work with the existing hydrology and protect ridgelines, understanding the relationship of the upper watershed and its influence on water quality and flow. Additionally, Olmsted, Jr. reminded the Citizens' Committee, for whom the report was written, that parks and parkways were located where they would provide flood control and manage water conservation problems. For the reader, the four case studies may blur and overlap between parkways, open space, and park systems. However, the intention of this last case study was to show that in concert, the park and parkway system in Los Angeles was designed to follow all water resources in hybrid greenbelts of water management, and build upon the argument developed in the first three studies for the design and thought process of Frederick Law Olmsted, Jr.

This case study added innovative water management beyond just parkways. In analyzing Los Angeles' flood and drought patterns as they related to Olmsted proposals, the extent of the Olmsted Brothers' design solutions mirrored the flood patterns such as in the Gardena Slough recreational plan. Creation of a water park, in this case, improved an otherwise derelict water resource while also maintaining the existing ecology of the site. River washes at the base of the mountains in the San Fernando Valley and San Gabriel Valley had historically provided water infiltration and groundwater recharge into the alluvial soils. Considered large parks, recreational fields played both a cultural and ecological role, and were located in these washes where inundation would not damage them. Athletic fields would be dry most years, but have the ability to manage overflow when necessary. Other recreational fields in the county were located in river bottoms and marshy areas such as the Ballona Creek Basin, a park classified as a Narrow Drainage Basin, where Olmsted, Jr. recommended these fields could be planted like meadows. Open space was also protected and utilized through permanent reservations of steep, brush-covered

mountain slopes preserved both for recreational value as well as “protection of watershed values.”⁵

As an ecological designer, Olmsted, Jr. also recommended beach reservations in which his design allowed for the beach to maintain natural tidal function. In a concern for wildlife, another water land, the marsh reservation at Bolsa Chica, used the estuary as a bird refuge. Open space from the top of the watershed to the mouth of the rivers, all the way to the sea, maintained water supply, preserved vegetation, prevented erosion, and protected wildlife in public space, all while also allowing recreational use of the lands. Design proposals within *Parks, Playgrounds and Beaches* elucidated multiplicity of park functions and anticipated design concepts found in 21st century landscape urbanism theory, such that projects like waterfronts could provide both economic development as well as ecological rehabilitation. Significant socio-cultural understanding of the city by this time provided essential links for creation of desirable spaces for human use in locations best adapted to the local ecology. And once again, hybridized agendas of flood control, water conservation, and parks could partially bill the cost of land acquisition to drainage works.

The archival research in these four case studies revealed that the master plan for Los Angeles combined the Olmsted Brothers’ work from 1914 - 1931 into a broad regional understanding of a range of ecosystems, the behavior of the watershed, and their design response to these ecological conditions, creating an aggregation of professional work into one proposal. The layout of the master plan provided grounds for speculation that the park system siting was both to ensure projects were built, *and* the designs were largely based on the best use of ecological factors. To clarify, many of the projects, such as the parkways, had been under design development for several years so there would have been an interest in ensuring the projects be built by including them in the comprehensive park plan. In addition, most Olmsted projects had been developed in response to local ecology, and with regard to cultural influences such as nearby museums, universities, and botanical gardens. Routing of the park system, therefore, would have provided public views of what the Olmsted firm considered exemplar landscape designs for the region, designs appropriate for Los Angeles’ aridity and other ecological conditions. Palos Verdes, parkways, the state park survey, and their Los Angeles watershed plan demonstrated ecological design of a city, ecological design of roadways, ecological design of open space, and ecological management

⁵ Olmsted Brothers and Bartholomew, *Parks, Playgrounds and Beaches*, 10.

of a watershed, all critically supportive of Olmsted, Jr.'s personal and professional values, and sophisticated in landscape architecture practice at the time. In many ways, these designs articulated an ideal as interpreted by the Olmsted firm for Southern California. Prior to late 20th century codification of ecological design, these projects also revealed an early understanding of ecological process, how to map it for design, and then use a variety of methods to inform the spatial layout of the design. Additionally, Olmsted, Jr. recognized that governmental structures were necessary in supporting his ambitions from the Palos Verdes' Art Jury, the Regional Planning Commission, the State Park Commission, to the Citizens' Committee, yet, as he would learn, those same governing bodies had the power to defeat bold projects as well.

During the 1930s there was a greater emergence of ecological awareness and words such as "ecosystem" were coined; by 1935, "ecology" was used in Olmsted Brothers job correspondence.⁶ In the 1930s, both natural and human-caused ecological devastation materialized, such as the Dust Bowl, named for the winds that eroded Midwestern and Southern farm fields, a consequence of severe drought and mismanagement of dryland farming techniques. As a result, by 1933 Secretary of the Interior Harold Ickes established the Soil Erosion Service, an agency that carefully studied and advised better land management. But other ecological ruin was naturally caused, such as in Los Angeles, in which a devastating 1938 flood killed 113 people and caused over \$40,000,000 in property damage. This flood's destruction was followed by a permanent channelization of all of the rivers in Los Angeles, built by the Army Corps of Engineers.

As noted in the introduction to this thesis, one can argue that the pinnacle period of American landscape architecture practice was during President Franklin Delano Roosevelt's New Deal enterprises. Under the agencies of the Works Progress Administration, Civilian Conservation Corps, Resettlement Administration, and Farm Security Administration, construction of roads through forests, recreational areas, parks, playgrounds, and new towns, required the unique training of landscape architects who

⁶ See Harold C. Bryant, Chairman of Everglades National Park Association to The Director, National Park Service, Letter, 14 January 1935, [Everglades National Park], #4022, O.A. Papers. In explanation of a field study of the Everglades, Bryant wrote within the letter, "Ecology. Understanding of present plant and animal interrelationships demands knowledge of earliest successions. On newly formed land, in great marsh areas and grasslands, ecologists find basic data. Here again primeval conditions are found which need to be conserved to provide a sample of those relationships which develop when land first begins to support plant and animal life."

understood the relationship of ecological conditions and new development. But this evolution in landscape architecture practice was short-lived. By the late 1940s, and through the influence of landscape architects Garrett Eckbo, Dan Kiley, and James Rose among others, the discipline moved to “design as art” and largely abandoned the previous focus on landscape ecology as the driver for form response. Modernism had progressed in architecture, but for many landscape architects, their discipline was criticized as remaining in an historicist Olmstedian aesthetic. Modernity, therefore, meant a rejection of numerous approaches established by the Olmsted firm. Many landscape architects during this period in American history willfully ignored ecological response, with aesthetics, politics, and economics the driver for design.

In many ways, this redirection of landscape architecture can be attributed to Frederick Law Olmsted, Jr. who, as a national leader in the discipline, held tightly to 19th century picturesque aesthetics of naturalism and ideal landscapes, never joining in modernist aesthetics. James Corner’s critique of landscape architecture’s “scenographic screening of environments,” a direct result of the nostalgic picturesque aesthetic disseminated by the Olmsted firm, continues to be pervasive, he argues, in much of 21st century landscape architecture practice.⁷ Due to Olmstedian traditions, intentionality in design is camouflaged behind seeming naturalism. The relinquishing of ecological principles for aesthetics in the mid-20th century did not find resurgence until the 1960s in the research and design work of Hideo Sasaki, Stanley White, Ian McHarg, and Philip Lewis, who recognized that landscape architecture had moved too far away from understanding natural systems. Unfortunately, by this period, environmental design in America had been usurped by engineers who solved ecological problems, too often without the nuance of aesthetic and multifunction. That hybridization of multifunctional agendas from the 1920s would only be reconsidered in the late 20th century.

METHODOLOGICAL CONTRIBUTIONS

For this thesis, analysis of primary data included a multifaceted incorporation of qualitative materials from letters, published reports and writing, to drawings, photos, plans,

⁷ Charles Waldheim, “Landscape as Urbanism.” In *The Landscape Urbanism Reader*, ed. Charles Waldheim (New York: Princeton Architectural Press, 2006), 38.

and maps. The challenge was to synthesize the mix of information in order to understand a project within its historic context. In the Olmsted firm's own writing, over 20,000 primary documents provided the basis of analysis. Due to the volume of primary documentation, an early requirement was the establishment of databases which organized documents, and which were constantly utilized for bookmarking key materials and reconfirming data. Analyzing the primary sources through the lens of landscape architecture and sustainable design practices offered new readings of this material. The letters between the firm and clients, politicians and influential officials afforded insights about design influence such as Henry O'Melveny's suggestions on the rerouting of the parkways around Shanty Town. Other valuable insights came from review of draft copies of reports, such as the early drafts for *Parks, Playgrounds and Beaches*, in which Olmsted, Jr. listed the precise pleasureway parks in drafts, but not in the final published report. These special parkways were not clarified in any other document beyond the unpublished drafts. Hundreds of Olmsted Brothers construction plans provided a different type of evidence. Technical drawings such as grading and planting plans as well as designs overlaid on topography maps corroborated an ecological approach to working with the exigencies of site topography, hydrology, and microclimate, and the design response to prove it.

Using the primary documents, another method was to digitally recreate an unbuilt plan for the Hollywood-Palos Verdes Parkway in Photoshop to understand Olmsted, Jr.'s written intentions of the visual quality as well as human scale aspect of the design. For a segment of the Hollywood-Palos Verdes Parkway, exact images of the proposed plants were grouped in 3-D over the original 2-D plan. As proportions and massing were the same as the original planting plan, the created digital image revealed the spatial experience of an unbuilt design (Figure 6.10). This method of using digital techniques offers invaluable application to the historian, providing new ways to understand the spatial quality of historic narratives and technical plans.

CONTINUED RELEVANCE OF THE OLMSTED PLANS

As the first comprehensive analysis of Olmsted Brothers landscapes in Los Angeles, the third question for this thesis probed how the firm's ideas might provide insight to current concerns such as water management, sustainable urban planning, and hybridized, multifunctional landscapes. Though the Los Angeles park plan was not built, the plan's

layout and approaches to land use, especially with regard to the rivers, continues to have relevance. Robert Garcia is a Los Angeles civil rights attorney and social justice activist who formed the non-profit The City Project in 1990 to advocate for access to green space for the urban poor and children of color in Los Angeles. Calling it “The Olmsted Vision,” Garcia has exploited the proposed Olmsted park plan as a rallying cry for green justice in the inner city. He uses the park master plan as a contrast to the lack of green space and causes of poor health and high obesity levels in Los Angeles where children don’t have access to green space, or a car in which to get to a park (Figure 9.1).

Other organizations in Los Angeles have also used the park and parkway plan to guide restoration of the Los Angeles River and an establishment of green spaces and bike paths along the river’s edge. Environmental non-profit Amigos de los Rios worked with community and public agencies to design the Emerald Necklace Expanded Vision Plan, inspired by the 1930 Olmsted master plan. Their vision notes that “when complete, the Emerald Necklace Regional Park Network will unify a vast region of Southern California from the desert through the San Gabriel Mountains to the Pacific Ocean, by linking more than 1,500 acres of parks and open spaces along an interconnected green-way around Rio Hondo, San Gabriel and the lower Los Angeles Rivers.”⁸ This is precisely the same intention as the 1930 Olmsted plan. In an example of how the firm’s East Coast work influenced the West, the name for the vision plan draws from the Boston plan of Frederick Law Olmsted, Sr. and Charles Eliot, though not built park designs by the Olmsted Brothers who envisioned the project for Los Angeles. The River Project, is yet another non-profit dedicated to natural resource protection, conservation, and enhancement of the Los Angeles rivers. Their reading list for “Water and Urban Planning” includes *Parks, Playgrounds and Beaches for the Los Angeles Region*, as it still has current value in urban design.

⁸ "Emerald Necklace Forest to Ocean Expanded Vision Plan," Amigos de los Rios, last modified 2017, accessed 30 November 2016, <http://www.amigosdelosrios.org/the-emerald-necklace-vision-plan>

RESEARCH DIRECTION FOR THE FUTURE

This study lays the foundation for further research opportunities. Issues of social injustice were found in the case study of the parkways such that further analysis could provide additional insights on understanding the Olmsted oeuvre, with this different lens challenging design that did support the underclass or disenfranchised. Additional study of key influencers in 1920s Los Angeles discussed within this thesis might also reveal new insights in the way environmental projects were developed, changed, or dismissed.

Another study could examine the influence of the Olmsted Brothers' Los Angeles work on the designs of others during the 20th century. Lastly, there would be value in a study of whether construction would have actually succeeded in the unbuilt project sites, that is, would the Hollywood-Palos Verdes Parkway designs have managed heavy influx of stormwater without channelization of the rivers? This would require multidisciplinary teamwork in landscape architecture, hydrological engineering, and computer modeling to provide more definitive simulations. All of these limitations are beyond the scope of this project; however, the archival documents provide some initial data for new research in any of these studies.

IMPLICATIONS FOR 21ST CENTURY DESIGN

Finally, the case studies offer implications for 21st century design. Beginning with the Palos Verdes design, the Olmsted firm showed the value of preplanning for ecological design, starting with the local ecology in both natural and human systems. As previously discussed, the firm's infrastructure development of this community is the component of greatest import and one which is typically unchanged over time. In-depth early ecological research and a design that aligns with those specific conditions can ultimately align cultural landscapes with natural systems, and set the course for continued success even as communities grow and change. This methodology will be especially necessary with anticipated climate change.

These case studies also reveal the value of strategic preservation of open space. While the beauty of many of these lands are desirable for development, their ecological value is perhaps greatest when left undeveloped for their often, non-market benefits. Open space can be used for watershed management, wildlife habitat, and preservation of

fragile ecosystems. These spaces also offer cultural value in health benefits, passive and active recreation, and the preserved scenic qualities of the native landscape. The Olmsted Brothers' plan for beaches to be open space was not only to maintain the ecological function of the beach ecosystem, but also to allow public enjoyment of a space that had been privatized by many who own homes along its edges. In the *State Parks Survey*, Frederick Law Olmsted, Jr. developed a measurement for valuing open space both qualitatively and quantitatively which continues to provide an example of broad considerations. Though it's a value unfortunately not shared by all, protection of natural resources against exploitation is still another lesson for 21st century planners.

The nature-culture relationship in landscape architecture is a critical component of successful new urban development and built form. Multifunctional landscapes offer a bridge between local ecology and cultural use. Multifunctionalism mixes aesthetics and ecological function, use and, sometimes, shared policy between jurisdictions. The Olmsted Brothers' projects were designed to demonstrate how to fix urban ecological problems *with* the design, a methodology which should be the top consideration for 21st century proposals. Currently in the U.S., engineers are required to be the leaders of large infrastructure projects over landscape architects, as perception is that the engineers are better trained for solving big problems. The challenge for landscape architecture is how to regain the footing of the 1920s -1930s where the discipline was deemed capable of both design and large-scale construction, working in collaboration with engineers, bringing ideas of multifunctional solutions to projects.

Automobility in the 21st century is also changing in many ways including the birth of autonomous cars and shared car ownership. According to a recent *Wall Street Journal* article, autonomous vehicles could "ultimately free up more than 250 million hours of commuting time a year, unlocking a so-called passenger economy."⁹ New technology that distracts these passengers from the scenery may require different approaches to the design of roadways in scale, location, and views. While transportation planning must anticipate cultural vicissitudes, it also offers opportunities for correctives. Historically, planning focused on the car has resulted in Los Angeles having the worst traffic in the United States per a 2017 study.¹⁰ Only within the past decade has some of the romance of individual

⁹ Tim Higgins, "The End of Car Ownership," *Wall Street Journal*, 21 June 2017.

¹⁰ "No surprise here: Los Angeles is the world's most traffic-clogged city, study finds," *Los Angeles Times*, last modified February 20, 2017, accessed 20 June 2017,

freedom in transportation worn away with Los Angeles enacting new, effective, and well-used public transit systems.

Lastly, the inherent temporal quality of landscape architecture is problematic as, without the long view, newcomers impatiently change the design. Policy mandates might provide the necessary adherence to the original plan, especially with regard to water and open space as both are the most vulnerable to development change. Open space policy seen in design guidelines protects important vegetation, mountain scarring, and views. From 2012 - 2016, California once again entered a period of drought, receiving a scant four inches of annual rainfall in Los Angeles. The expense of water and its restrictions initiated, at least temporarily, a cultural change and renaissance of regionalism in a removal of turf lawns, incorporation of drought-tolerant planting, and legalization of greywater use in the landscape. The engineering of water systems has also been reconsidered with California opting for dam removals and natural hydrological patterns to be restored. The contribution of the Olmsted Brothers provides value for designs which are hybrid, plastic, and strategic, offering 21st century practitioners paradigms for potential design solutions in a changing ecology.

<http://www.latimes.com/local/lanow/la-me-traffic-los-angeles-20170220-story.html>

POSTSCRIPT

POSTSCRIPT OF THE OLMSTED LEGACY IN LOS ANGELES

In 1931, Frederick Law Olmsted, Jr. returned to Brookline, Massachusetts, remaining principal of the Olmsted Brothers until his retirement in 1949. At the peak of the practice, the Olmsted Brothers employed 55-60 individuals, including not only landscape architects, but architects, engineers, horticultural specialists, and craftsmen.¹ However, by 1950, the firm had been reduced to only 12 employees. David Grayson Allen writes that upon “John’s death in 1920, Olmsted, Jr.’s new work and interests in the West, and the effects of the Depression on business all helped siphon off resources and contribute to the firm’s financial decline.”² Frederick Law Olmsted, Jr. and his wife Sarah moved to California once more, living in Palo Alto (1951-1957) to be near their only child, Charlotte, and four grandchildren. Although the firm was quite small at this point, according to Allen, Olmsted, Jr.’s retirement from practice significantly affected the firm. Two senior landscape architects, Edward Whiting and William Marquis, remained along with younger principals Artemus Richardson, Charles Riley, and Carl Parker, who all purchased a share of the practice.³ The last new partner was horticulturalist James Hudak who joined the firm in 1955.

¹ David Grayson Allen, *Olmsted National Historic Site*, 11, citing Amy Millman, *Historic Resource Study: Frederick Law Olmsted National Historic Site* (Boston: Division of Planning and Design, North Atlantic Regional Office, National Park Service, U.S. Department of the Interior, November 1982), 11-20, 47-58, 97-101.

² Allen, *Olmsted National Historic Site*, 11.

³ Allen, *Olmsted National Historic Site*, 12.

Through the 1950s, the firm continued in the same type of work they had performed for the past 100 years, though never as busy as the 1920s. City planning projects, which had been a large part of their portfolio, were now completed by municipal planners who provided in-house services for cities. By 1961, most of the partners had retired with only Richardson and Hudak still in practice. Interest in Frederick Law Olmsted, Sr. garnered attention from scholars during the 1960s, who visited Fairsted to study the firm's plans and letters. To better archive these resources, it was Richardson who donated the Olmsted business papers and job correspondence to the Library of Congress in Washington, D.C. in 1967.

Fairsted, the Olmsted family home and office since 1883, continued to be both a home and office as James Hudak lived at the residence. Allen writes that when Hudak decided to move out in the 1960s, he needed to pull out equity from the business in order to purchase a home. Rather than liquidate the business, Richardson bought out Hudak, changing the firm name to Olmsted Associates, Inc. Hudak remained an employee until 1979 when the National Park Service bought the home and property. Richardson moved the office to New Hampshire and changed the firm name once more to The Olmsted Office. The famous firm, which began with such far-sightedness and influence on American landscape architecture, lived on in the landscapes from East to West and in the legacy of landscape architecture pioneers.

BIBLIOGRAPHY

PRIMARY SOURCES

MANUSCRIPT COLLECTIONS

Frederick Law Olmsted National Historic Site. Brookline, Massachusetts.

Individual collections are divided as follows:

Plans & Drawings, c.1847-1979 (Bulk 1882-1970)

Photo albums, 1867-1978

Planting Lists, 1884-1962

Lithographs, 1877-1979

Records & Reports, 1857-1954

Post 1949 Correspondence, 1949-1980 (Bulk)

California Office Correspondence, 1928-1938

Western Office Correspondence, 1928-1958

Olmsted Associates Records. Series B. Library of Congress. Manuscripts Division. Washington, D.C.

Palos Verdes Homes Association Photograph Collection. Local History Room. Palos Verdes Peninsula Library. Palos Verdes, California.

Frances Loeb Library. Special Collections. Graduate School of Design. Harvard University. Boston, Massachusetts

Olmsted Collection. Series C, D, & F, Correspondence to/from FLO, Sr. Correspondence to/from FLO, Jr., Correspondence to/from Olmsted family.

Olmsted Collection, Series B, Series C, 1-20, Correspondence to/from John C. Olmsted.

Shurcliff Papers, Arthur A. and Shurcliff, Sidney N. Series B (professional correspondence) and Series F (Correspondence/Personal papers of Arthur A. Shurcliff).

Records of the Department of Landscape Architecture, 1901-1972, Curricula.

The Bancroft Library. University of California, Berkeley.

Badè Papers, William Frederic. MS39C2 72/174c, Box 1.

Olmsted, Frederick Law, 1870-1957, 1910-1950. BANC MSS 77/792.

Olmsted Reports, Frederick Law, 1943-47. MS66D3, 93/138C, Box 1.

Johnson Papers, Robert Underwood. MSi-D2 CB385 Box 4.

Rare Books, The Huntington Library. San Marino, California.

Rancho San Pedro Reference Collection. Box 243 Oversize. Folders 394-401. Department of Archives and Special Collections. California State University, Dominguez Hills.

California Historical Society Collection. University of Southern California, The Regional History Collection. Los Angeles, California.

Historical Photo Collection of the Department of Water and Power, City of Los Angeles.

INTERVIEWS

Cushing, Elizabeth Hope (biographer for Frederick Law Olmsted, Jr.), Phone conversation with Christine Edstrom O'Hara, San Luis Obispo, California, September 15, 2015.

PUBLICATIONS

_____. *Instruction in Landscape Architecture, 1915-1916, Harvard University and Lawrence Scientific School*. Cambridge, MA: Harvard University, 1915.

Adams, Thomas. *Regional Plan of New York and Its Environs*. Philadelphia: William Fell Co., 1929.

Arnold, Bion J. "Preliminary Report Upon the Transportation Problem of Los Angeles." *The California Outlook* 11, no. 9 (1911): 2-20.

Arnold, Bion J., John R. Freeman and Frederick Law Olmsted. *City Plan for Pittsburgh: Outline and Procedure*. Pittsburgh: Pittsburgh Civic Commission, 1910.

Bartlett, Dana. *The Better City; a Sociological Study of a Modern City*. Los Angeles: The Neuner Company Press, 1907.

Bartley, Ernest R. "The Tidelands Oil Controversy." *The Western Political Quarterly* 2, no. 1 (1949): 135-153.

Boston Chapter, ASLA. "James Frederick Dawson: A Biographical Minute on His Professional Life and Work." *Landscape Architecture* 32, no. 1 (1941): 1-2.

Cheney, Charles H. "Palos Verdes: Eight Years of Development." *The Architect and Engineer* 100 (1930): 35-42.

Eliot, Charles William. *Charles Eliot, Landscape Architect, a Lover of Nature and of His Kind, Who Trained Himself for a New Profession, Practiced It Happily, and through It Wrought Much Good*. Boston: Houghlin, Mifflin Company, 1902.

Eliot II, Charles and Donald F. Griffin. *Report of the Citizens Committee on Parks, Beaches and Recreational Facilities*. Los Angeles: The Haynes Foundation, 1945.

Eliot II, Charles William. *Waterlines: Key to Development of Metropolitan Los Angeles*. Los Angeles: The Haynes Foundation, 1946.

Graves, H.S. and Frederick Law Olmsted, Jr.¹ "Graves and Olmsted Oppose Public Domain Bills." *American Forests* 38 (1932): 109.

¹ For clarity in this bibliography, "Jr." is added to all references by Frederick Law Olmsted, Jr. though publications after 1903 would be listed as authored by Frederick Law Olmsted.

- Greater Los Angeles Citizens Committee, Inc. Carl C. McElvy, architect, Ruth Patricia Shellhorn, landscape architect and Henry Klumb, planning architect. *Shoreline Development Study, Playa Del Rey to Palos Verdes, a Portion of a Proposed Master Recreation Plan for the Greater Los Angeles Region*. Los Angeles, 1944.
- Griffin, Donald F. *Plans and Action for the Development of the Los Angeles Metropolitan Coastline*. Los Angeles, 1943.
- Griffith, Griffith J. *Parks, Boulevards, and Playgrounds*. Los Angeles: Prison Reform League, 1910.
- Hjelte, George. "Facilities for Recreation." In *Los Angeles: Preface to a Master Plan*, edited by George Robbins and L. Deming Tilton, 213-226. Los Angeles: The Pacific Southwest Academy, 1941.
- Hunt, Myron and H.C. Chambers. *The Architecture of the Pasadena Public Library*, 3 unpublished, 1927.
- Lewis, E.G. *The Palos Verdes of Today*. unpublished, 1926.
- Lilienthal, David. *TVA: Democracy on the March*. New York: Harper & Row, 1944.
- MacKaye, Benton. "An Appalachian Trail: A Project in Regional Planning." *The Journal of the American Institute of Architects* 9 (1921): 325-330.
- MacKaye, Benton. "Regional Planning." *The Sociological Review* 20, no. 4 (1928): 293-299.
- MacKaye, Benton. "Regional Planning and Ecology." *Ecological Monographs* 10, no. 3 (1940): 349-353.
- Meinecke, E.P. *A Report Upon the Effect of Excessive Tourist Travel on the California Redwood Parks*. Sacramento: State of California, Department of Natural Resources, Division of Parks, 1928.
- Morris, Samuel. "Water Problems of the Metropolitan Area." In *Los Angeles: Preface to a Master Plan*, edited by George Robbins and L. Deming Tilton, 71-90. Los Angeles: The Pacific Southwest Academy, 1941.
- Nolen, John. "Real Estate and City Planning." *The City Plan* 2 (1916): 3-4.
- Nolen, John. *New Towns for Old*. Boston: Marshall Jones Co., 1927.
- Nolen, John and Henry Vincent Hubbard. *Parkways and Land Values II*. Cambridge: Harvard University Press, 1937.
- Olmsted Brothers and Bartholomew and Associates. *Parks, Playgrounds and Beaches for the Los Angeles Region*. Los Angeles: Citizens' Committee on Parks, Playgrounds and Beaches, 1930.

- Olmsted Brothers and Ansel F. Hall. *Report on Proposed Park Reservations for East Bay Cities*. Berkeley: Bureau of Public Administration, University of California, 1930.
- Olmsted, Sr. Frederick Law. *Report of Mr. Olmsted to Major R.W. Kirkham*. 1-9. unpublished, 1865.
- Olmsted Jr., Frederick Law. "The Relation of Reservoirs to Parks." In *American Park and Outdoor Art Association*, 3-33: Rockwell and Churchill Press, 1899.
- Olmsted Jr., Frederick Law. "The Scope and Results of City Planning in Europe." *The Survey: Social, Charitable, Civic: A Journal of Constructive Philanthropy* 22, no. 13 (1909): 497-508.
- Olmsted Jr., Frederick Law. "City Planning." In *Second National Conference on City Planning and Congestion of Population*, 284-290. Rochester, N.Y., 1910.
- Olmsted Jr., Frederick Law. "City Planning Needs of Kansas City with Special Reference to the Treatment of Water Courses." In *Proceedings of the Ninth National Conference on City Planning*, 79-90. Kansas City, MO, 1917.
- Olmsted Jr., Frederick Law. "Parks and Playgrounds." *The American Magazine of Art* 11, no. 9 (1920): 307-315.
- Olmsted Jr., Frederick Law, Harland Bartholomew and Charles Henry Cheney. *A Major Traffic Street Plan for Los Angeles*. Prepared for the Committee on Los Angeles Plan of Major Highways of the Traffic Commission of the City and County of Los Angeles, 1924.
- Olmsted Jr., Frederick Law. "Border Roads for Parkways and Parks." *Landscape Architecture* 16 (1926): 74-84.
- Olmsted Jr., Frederick Law. *Development and Planning of Towns in Interests of Traffic*. In *Proceedings of the 5th Congress – Milan*. 4-20. Milan, Italy, 1926.
- Olmsted Jr., Frederick Law. "Palos Verdes Estates." *Landscape Architecture* 17, no. 4 (1927): 254-275.
- Olmsted, Jr., Frederick Law. "Notes on Laying out Roads for Pleasure Travel in Scenic Areas." *City Planning* 2 (1928): 278-283.
- Olmsted Jr., Frederick Law. *Report of State Park Survey of California*. Sacramento: Sacramento State Printing Office, 1929.
- Olmsted Jr., Frederick Law. "Highways and Landscape." In *Conference on City and Regional, State and National Planning*, edited by Committee on Highway Beautification of the American Automobile Association, 195-197. Washington, D.C.: American Planning and Civic Association, 1935.
- Olmsted Jr., Frederick Law. "Landscape of Beauty and Meaning." *Point Lobos Reserve: State Park, California. Interpretation of a primitive landscape* (1954): 19-35.

- Pomeroy, Hugh. "Los Angeles Civic Center Street Plan." *Community Builder* 1, no. 18 (1928).
- Roth, Marshall Breeden. *California. All of It*. Los Angeles: Kenmore Publishing Co., 1925.
- Tilton, L. Deming. "The Master Plan." In *Los Angeles: Preface to a Master Plan*, edited by George Robbins and L. Deming Tilton, 253-266. Los Angeles: The Pacific Southwest Academy, 1941.
- Vanderlip, Frank A. *From Farm Boy to Financier*. New York: D. Appleton-Century Company, Inc., 1935.
- Veiller, Lawrence. *A Model Housing Law*. New York: Survey Associates Inc., 1914.
- Withey, Henry F. "The Work of Charles Henry Cheney, Architect and City Planner." *The Architect and Engineer* 53, no. 3 (1918): 39.

SECONDARY SOURCES

- _____. Associated Press. "No Surprise Here: Los Angeles Is the World's Most Traffic-Clogged City, Study Finds." *Los Angeles Times* (2017). <http://www.latimes.com/local/lanow/la-me-traffic-los-angeles-20170220-story.html> (accessed June, 20 2017).
- _____. *Sunset Western Garden Book*. 8th Edition, edited by Kathleen Norris Brenzel. Menlo Park, CA: Sunset Publishing, 2007.
- Addonizio, Lane. *Pleasure Driving the Greensward Way: The Role of Roadways in New York's Central Park*. 1-13, unpublished, 2014.
- Akimoto, Fukuo. "Charles H. Cheney of California." *Planning Perspectives* 18, no. 3 (2003): 253-275.
- Allen, David Grayson. *Olmsted National Historic Site and the Growth of Historic Landscape Preservation*. Lebanon, NH: University Press of New England, 2007.
- Amigos de los Rios, "Emerald Necklace Forest to Ocean Expanded Vision Plan" <http://www.amigosdelosrios.org/the-emerald-necklace-vision-plan> (accessed December 1, 2016).
- Axelrod, Jeremiah B.C. *Inventing Autopia: Dreams and Visions of the Modern Metropolis in Jazz Age Los Angeles*. Berkeley, CA: University of California Press, 2009.
- Benedict, Mark A., Edward T. McMahon and Conservation Fund. *Green Infrastructure: Linking Landscapes and Communities*. Washington, D.C.: Island Press, 2006.

- Beveridge, Charles. "Regionalism in Frederick Law Olmsted's Social Thought and Landscape Design Practice." In *Regional Garden Design in the United States*, edited by Therese O'Malley and Marc Treib. Washington, D.C.: Dumbarton Oaks Research Library and Collection, 1995.
- Block, Jean. "Myron Hunt in the Midwest." In *Myron Hunt, 1868-1952: The Search for Regional Architecture*, edited by Baxter Art Gallery, 9-21. Santa Monica, California: Hennessey and Ingalls, Inc., 1984.
- Bottles, Scott L. *Los Angeles and the Automobile: The Making of the Modern City*. Berkeley and Los Angeles: University of California Press, 1987.
- California State Parks Planning Division. *Planning Milestones for the Park Units and Major Properties Associated with the California State Parks System*. Sacramento, 2013.
- Camp, Harry W. *Historical Sketch of Recreation Research in the USDA Forest Service*. 1983.
- Carr, Ethan. *Wilderness by Design: Landscape Architecture & the National Park Service*. Lincoln and London: University of Nebraska Press, 1998.
- Clark, Alison. "Myron Hunt in Southern California." In *Myron Hunt, 1868-1952: The Search for Regional Architecture*, edited by Baxter Art Gallery. Santa Monica: Hennessey and Ingalls, Inc., 1984.
- Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. London and New York: Verso, 1995.
- Critchfield, William B. *Profiles of California Vegetation*. Berkeley, CA: U.S. Department of Agriculture, 1971.
- Davis, Mike. *Ecology of Fear: Los Angeles and the Imagination of Disaster*. New York: Metropolitan Books, Henry Holt and Company, Inc., 1998.
- Eisenman, Theodore S. "Frederick Law Olmsted, Green Infrastructure and the Evolving City." *Journal of Planning History* 12, no. 4 (2013): 287-311.
- Fabos, J.G. "Greenway Planning in the United States: Its Origins and Recent Case Studies." *Landscape and Urban Planning* 68, no. 2-3 (2004): 321-342.
- Firehock, Karen. *Strategic Green Infrastructure Planning: A Multi-Scale Approach*. Washington, D.C.: Island Press, 2015.
- Fogelson, Robert M. *The Fragmented Metropolis, Los Angeles, 1850-1939*. Cambridge: Harvard University Press, 1967.
- Fogelson, Richard E. *Planning the Capitalist City: The Colonia Era to the 1920s*. Princeton, N.J.: Princeton University Press, 1986.

- Foster, Mark. "The Model-T, the Hard Sell, and Los Angeles's Urban Growth: The Decentralization of Los Angeles During the 1920s." *Pacific Historical Review* 44 (1975): 459-484.
- Foster, Mark. *From Streetcar to Superhighway: American Planners and Urban Transportation*. Philadelphia: Temple University Press, 1981.
- Gates, Thomas P. "The Palos Verdes Ranch Project: Olmsted Brothers' Design Development for a Picturesque Los Angeles Suburb Community of the 1920s." *Architronic* (1997). <http://architronic.sead.kent.edu/v6n1/v6n1.03ref.html> (accessed January 10, 2015).
- General Plan Program Manager, Planning Division. *General Planning Handbook*. Sacramento: California State Parks Planning Division, 2010.
- Gish, Todd. "Myth Busting: Challenging the Notion of an Unplanned Los Angeles." *Planning* (2012) <https://www.planning.org/planning/2012/jan/lareimaginedside.html> (accessed October 25, 2016).
- Glaab, Charles Nelson and A. Theodore Brown. *A History of Urban America*. New York: Macmillan, 1967.
- Goldin, Greg and Sam Lubell. *Never Built Los Angeles*. Los Angeles: Metropolis Books, 2013.
- Gumprecht, Blake. *The Los Angeles River: Its Life, Death and Possible Rebirth*. Baltimore and London: Johns Hopkins University, 1999.
- Hawkins, III, William J. *The Legacy of Olmsted Brothers in Portland, Oregon*. Portland: William J. Hawkins, III, 2014.
- Higgins, Tim. "The End of Car Ownership." *Wall Street Journal*, June 21, 2017.
- Hikida, Susan K. "Community History Resource Project, Category I: Immaterial Nigger Slough." 1-8: Special Collections, California State University, Dominguez Hills, 1984.
- Hise, Greg and William Deverell. *Eden by Design: The 1930 Olmsted-Bartholomew Plan for the Los Angeles Region*. Berkeley: University of California Press, 2000.
- Hise, Greg and William Deverell. "The 'Art Political' and Los Angeles Park Planning." *Planning Perspectives* 16, no. 4 (2001): 329-331.
- Hise, Greg and William Deverell. "The Afterlife of a Master Plan." In *Planning Los Angeles*, edited by David C. Sloane, 204-211. Chicago and Washington, D.C.: American Planning Association Planners Press, 2012.
- Howett, Catherine. "Ecological Values in Twentieth-Century Landscape Design: A History and Hermeneutics." *Landscape Journal* 7, no. 2 (1998): 80-98.
- Johnson, Catherine Joy. "The Olmsted Designs for Washington Park Arboretum." *Washington Park Arboretum Bulletin* 52, no. 1 (1989).

- Johnson, Catherine Joy. "Olmsted in the Pacific Northwest: Private Estates and Residential Communities." *Friends of Seattle's Olmsted Parks* (1997).
- Johnson, Catherine Joy. "James Frederick Dawson." In *Pioneers of American Landscape Design*, edited by Charles Birnbaum and Robin Karson, 36-38. New York: McGraw-Hill Companies, Inc., 2000.
- Kahrl, William L. *Water and Power: The Conflict over Los Angeles' Water Supply in the Owens Valley*. Berkeley: University of California Press, 1982.
- Karson, Robin. *The Muses of Gwinn: Art and Nature in a Garden Designed by Warren Manning, Charles A. Platt and Ellen Biddle Shipman*. Sagaponack, NY: Sagapress, 1995.
- Kirker, Harold. *Old Forms on a New Land: California Architecture in Perspective*. Niwot: Roberts Rinehart Publishers, 1991.
- Klaus, Susan. "Efficiency, Economy, Beauty: The City Planning Reports of Frederick Law Olmsted, Jr. 1901-1915." *American Planning Association Journal* 57, no. 4 (1991): 456-470.
- Klaus, Susan. "All in the Family: The Olmsted Office and the Business of Landscape Architecture." *Landscape Journal* 16, no. 1 (1997): 456-470.
- Klaus, Susan. *A Modern Arcadia: Frederick Law Olmsted Jr and the Plan for Forest Hills Gardens*. Amherst: University of Massachusetts Press, 2002.
- Kolva, Jeanne. *Olmsted Parks in New Jersey*. Atglen, PA: Schiffer Publishing, 2011.
- Krueckeberg, Donald A. "'From the Backyard Garden to the Whole U.S.A.: A Conversation with Charles W. Eliot, 2nd'." In *The American Planner*, edited by Donald A. Krueckeberg, 350-365. New York: Metheun, 1983.
- Lenihan, Gaye. "Mountain View Cemetery." *Oakland Heritage Alliance News* 7, no. 2 (1987): 2-7.
- Levee, Arleyn. "The Olmsted Brothers' Residential Communities: A Preview of a Career Legacy." In *The Landscape Universe: Historic Designed Landscapes in Context*, edited by Charles Birbaum, 28-45. Wave Hill, Bronx, New York: The Catalog of Landscape Records in the United States at Wave Hill in conjunction with the National Park Service Preservation Assistance Division, 1993.
- Levee, Arleyn. "John Charles Olmsted." In *Pioneers of American Landscape Design*, edited by Charles Birnbaum and Robin Karson, 282-285. New York: McGraw-Hill Companies, Inc., 2000.
- Longstreth, Richard. *City Center to Regional Mall: Architecture, the Automobile and Retailing in Los Angeles, 1920-1950*. Cambridge, MA: MIT Press, 1998.

- Marriott, Dan. "Roads Designed for Pleasure: British Influences on the American Motor Parkway." PhD. diss., University of Edinburgh, 2015.
- McGuire, Diane Kostial. "Early Site Planning on the West Coast: Frederick Law Olmsted's Plan for Stanford University." *Landscape Architecture* 47 (1957): 344-349.
- McHarg, Ian. *A Quest for Life: An Autobiography*. New York: John Wiley & Sons, 1996.
- Meyer, Elizabeth K. "The Expanded Field of Landscape Architecture." In *Ecological Design and Planning*, edited by George F. Thompson and Frederick R. Steiner, 45-79. New York: John Wiley & Sons, Inc., 1997.
- Meyer, Elizabeth K. "The Post-Earth Day Conundrum: Translating Environmental Values into Landscape Design." In *Environmentalism in Landscape Architecture*, edited by Michel Conan, 22, 184-244. Washington, D.C.: Dumbarton Oaks Research Library and Collection, 2000.
- Miramontes, Bonita Lucille Braddock. "Research Resource Materials on the Origins of "Nigger Slough" in the Dominguez Family Papers." 1-26: Special Collections of the College Library, California State College, Dominguez Hills, 1977.
- Morgan, Delane. *The Palos Verdes Story*. Palos Verdes Peninsula: Palos Verdes Peninsula Library Foundation, 1983.
- Morgan, Keith N., Elizabeth Hope Cushing and Roger G. Reed. *Community by Design: The Olmsted Firm and the Development of Brookline, Massachusetts*. Amherst, MA and Boston, MA: University of Massachusetts Press Amherst and Boston in association with Library of American Landscape History, 2013.
- National Association for Olmsted Parks and Frederick Law Olmsted National Historic Site. *Master List of Design Projects of the Olmsted Firm, 1857-1979*, edited by Lucy Lawliss, Caroline Loughlin and Lauren Meier. Washington, D.C.: National Association for Olmsted Parks, 2008.
- Ndubisi, Forster. *Ecological Planning: A Historical and Comparative Synthesis*. Baltimore: Johns Hopkins University Press, 2002.
- O'Hara, Christine Edstrom. "The Panama-California Exposition, San Diego, 1915: The Olmsted Brothers' Ecological Park Typology." *The Journal for the Society of Architectural Historians* 7, no. 1 (2011): 64-81.
- Olmsted, Sr., Frederick Law. *The Papers of Frederick Law Olmsted: The Last Great Projects, 1890-1895*. Vol. IX, edited by David Schuyler and Gregory Kaliss. Baltimore: John Hopkins University Press, 2015.
- Orsi, Jared. *Hazardous Metropolis: Flooding and Urban Ecology in Los Angeles*. Berkeley and Los Angeles: University of California Press, 2004.
- Overend, William. "2-Room Office to Lofty Perch: The 100-Year Odyssey of L.A.'s Oldest Law Firm." *Los Angeles Times*, September 28, 1987.

- Perry, Bob. *Landscape Plants for Western Regions: An Illustrated Guide to Plants for Water Conservation*. Claremont, CA: Land Design Publishing, 1992.
- Peterson, Jon A. "Frederick Law Olmsted Sr. And Frederick Law Olmsted Jr.: The Visionary and the Professional." In *Planning the Twentieth-Century American City*, edited by Mary Corbin Sies and Christopher Silver, 37-54. Baltimore: Johns Hopkins Press, 1996.
- Peterson, Jon A. "The Birth of Organized City Planning in the United States, 1909-1910." *Journal of American Planning Association* 75, no. 2 (2009): 123-33.
- Pincetl, Stephanie. *Transforming California: A Political History of Land Use and Development*. Baltimore: Johns Hopkins Press, 1999.
- Pittari, Jr., John J. "Practical Idealism: Frederick Law Olmsted, Jr. And the Modern American City Planning Movement." PhD. diss., University of Washington, 1997.
- Platt, Lorne A. "Planning Ideology and Geographic Thought in Early Twentieth Century: Charles Whitnall's Progressive Era Park Designs for Socialist Milwaukee." *Journal of Urban History* 36, no. 6 (2010): 771-791.
- Rawson, Michael. *Eden on the Charles: The Making of Boston*. Cambridge: Harvard University Press, 2010.
- Reyner, Banham. *Los Angeles: The Architecture of Four Ecologies*. New York: Harper & Row, 1971.
- Roth, Matthew William. "Concrete Utopia: The Development of Roads and Freeways in Los Angeles, 1910-1950." PhD. diss., University of Southern California, 2007.
- Rybczynski, Witold. *Makeshift Metropolis: Ideas About Cities*. New York: Scribner, 2010.
- Schaffer, Marguerite S. "Scenery as an Asset: Assessing the 1930 Los Angeles Regional Park Plan." *Planning Perspectives* 16, no. 4 (2001): 357-382.
- Schrepfer, Susan R. *The Fight to Save the Redwoods: A History of Environmental Reform, 1917-1978*. Madison, WI: University of Wisconsin Press, 1983.
- Simo, Melanie. *100 Years of Landscape Architecture: Some Patterns of a Century*, edited by American Society of Landscape Architects. Washington, D.C.: Spacemaker Press, 1999.
- Simo, Melanie. *The Coalescing of Different Forces and Ideas: A History of Landscape Architecture at Harvard, 1900-1999*. Cambridge: The Harvard University Graduate School of Design, 2000.
- Sitton, Tom "Private Sector Planning for the Environment," *Land of Sunshine: An Environmental History of Metropolitan Los Angeles*, edited by William Deverell and Greg Hise. Pittsburgh: University of Pittsburgh, 2005.

- Spirn, Anne Whiston. "Constructing Nature: The Legacy of Frederick Law Olmsted." In *Uncommon Ground: Rethinking the Human Place in Nature*, edited by William Cronon, 91-113. London: W.W. Norton & Company, 1996.
- Starr, Kevin. *Material Dreams: Southern California through the 1920s*. New York and Oxford: Oxford University Press, 1990.
- State of California, Resources Agency, "California Watershed Program", watershed@conservation.ca.gov
<http://www.conservation.ca.gov/dlrp/wp/Documents/California%20Watershed%20Program.pdf> (accessed September 8, 2016).
- Steiner, Frederick R. *The Living Landscape, a Second Edition: An Ecological Approach to Landscape Planning*. New York: McGraw Hill, 2000.
- Streatfield, David C. "The Evolution of the California Landscape." *Landscape Architecture* 66, no. 2 (1976): 117-125.
- Streatfield, David C. *California Gardens: Creating a New Eden*. New York: Abbeville Press, 1994.
- Sutter, Paul. *Driven Wild: How the Fight against Automobiles Launched the Modern Wilderness Movement*. Seattle: University of Washington Press, 2002.
- Townsend, Robert S., Christopher J. Carr, William M. Sloan and Miles H. Imwalle. *California Tidelands and Submerged Land Leasing for Conservation Purposes*. San Francisco: Morrison Foerster, 2009.
- Trust for Public Land. *Building Green Infrastructure: Land Conservation as a Watershed Protection Strategy*. San Francisco: Trust for Public Land, 2000.
- Tygiel, Jules. "Introduction, Metropolis in the Making: Los Angeles in the 1920s." In *Metropolis in the Making: Los Angeles in the 1920s*, edited by Tom Sitton and William Deverell, 1-9. Berkeley: University of California Press, 2001.
- Venice Heritage Foundation. "The History of the Red Car-Venice Short Line" http://veniceheritagemuseum.org/VHF/RED_CAR_HISTORY.html (accessed September 1, 2016).
- Waldheim, Charles. "Landscape as Urbanism." In *The Landscape Urbanism Reader*, edited by Charles Waldheim, 35-53. New York: Princeton Architectural Press, 2006.
- Water Supply Department, Government of Hong Kong. "History of Water Supply in Hong Kong (1946-2007)." *Total Water Management* (2008).
- Weiss, Marc A. *The Rise of the Community Builders: The American Real Estate Industry and Urban Land Planning*. New York: Columbia University Press, 1987.
- Weitze, Karen. *California's Mission Revival*. Los Angeles: Hennessey & Ingalls, 1984.

- Young, Terence. "Moral Order, Language and the Failure of the 1930 Recreation Plan for Los Angeles County." *Planning Perspectives* 16, no. 4 (2001): 333-356.
- Zube, Ervin. "The Advance of Ecology." *Landscape Architecture* 76, no. 2 (1986): 58-67.

APPENDIX 1

LIST OF OLMSTED BROTHERS PROJECTS IN CALIFORNIA

This is a comprehensive list of projects for which the Olmsted Brothers consulted or designed in California. Many of the job numbers for state parks appear to be placeholders for future work, as there were no plans or correspondence for them. Projects are separated by projects type then listed by job number, project name, and dates of correspondence and/or plans.¹ Job names are drawn directly from the Olmsted Brothers files as they were identified, with bolded projects located in Los Angeles County.

PARKS, PARKWAYS, RECREATION AREAS AND SCENIC RESERVATIONS

- 291 Golden Gate Park, San Francisco, 1898-1955 (note project began with FLO, Sr.)
- 2899 Calaveras Big Trees/Calaveras Big Tree Grove, Calaveras County, 1903-1904
- 5280 Sacramento Park System, Sacramento, 1910-1911
- 5371 Agriculture Fair Park, Los Angeles, 1910**
- 5373 Los Angeles Traffic/Los Angeles Traffic Commission, Los Angeles, 1922-1935**
- 5390 Riverside Park System, Riverside, 1913-1914
- 5391 Fairmount Park, Riverside, 1911-1912
- 5410 Redlands California Park System, Redlands, 1911**
- 6093 Berkeley Metropolitan Park System, Berkeley, 1914-1955
- 8004 Bluff Park/Gaffey Canyon/ Jones, Mr., Long Beach, 1922**
- 8006 Recreation Park, Monrovia, 1922-1923**
- 8008 Santa Cruz Park, Long Beach, 1922-1955**
- 8009 Bluff Park/The Bluff, Long Beach, 1921-1924**
- 8064 Monterey General Parks/General Park Plan, Monterey, 1913-1926
- 8072 California State Park Commission, Del Norte, 1925-1953**
- 8083 Point Lobos, Point Lobos, 1913-1954
- 8099 Yosemite National Park, Yosemite, 1907-1954
- 8101 Hollywood-Palos Verdes Blvd./Southwest District Parkways, Hollywood, 1914-1937**
- 8102 Angeles-Mesa Parkway, Los Angeles, 1926**
- 8200 Humboldt Redwood State Park, Humboldt County, 1914-1947
- 8202 Leimert Park/Leimert Square, Los Angeles, 1927-1938**

¹ Note all information is drawn from *The Master list of Design Projects of the Olmsted Firm, 1857-1979*. See National Association for Olmsted Parks and Frederick Law Olmsted National Historic Site, *The Master list of Design Projects of the Olmsted Firm, 1857-1979*, eds. Lucy Lawliss, Caroline Loughlin, and Lauren Meier (Washington, D.C.: National Association for Olmsted Parks, 2008).

- 8204 Yosemite National Park, n.d.
- 8211 Beverly Hills – Roxbury Drive Playground, Beverly Hills, 1928-1929**
- 8212 La Cienega Playground, Beverly Hills, 1928-1929**
- 8232 Pioneer Park, Burbank, 1929-1930**
- 8236 Buena Vista Avenue Improvement, Riverside, 1929-1931
- 8240 Redondo Parks, Redondo, 1929**
- 8260 Malibu Park/Marblehead Land Company, Los Angeles, 1930-1936**
- 8267 Kings River Canyon/Sequoia National Forest/Kings River Canyon Region, Sequoia National Forest, 1921-1947
- 8300 Del Norte Coast Park, Del Norte County, 1925-1953
- 8301 Santa Monica State Park/Santa Monica Beach Park, Santa Monica, 1931-1932**
- 8302 Hiouchi Park/California State Parks, Del Norte County (no plans or corresp.)
- 8303 Prairie Creek Redwood Park/California State Parks, Humboldt County (no plans or corresp.)
- 8304 Humboldt Lagoons/California State Parks, Humboldt County (no plans or corresp.)
- 8305 Hickey Grove/California State Parks, Mendocino County (no plans or corresp.)
- 8306 Dimmick Park/California State Parks, Mendocino County (no plans or corresp.)
- 8307 Van Damme Beach Park/California State Parks, Mendocino County (no plans or corresp.)
- 8308 Fort Ross Park/California State Parks, Sonoma County (no plans or corresp.)
- 8309 Mount Tamalpais Park/California State Parks, Marin County (no plans or corresp.)
- 8310 McArthur-Burney Falls Park/California State Parks, Shasta County (no plans or corresp.)
- 8311 General Bidwell Park/California State Parks, Butte County (no plans or corresp.)
- 8312 Sonoma Mission Park/California State Parks, Sonoma County (no plans or corresp.)
- 8313 Mount Diablo Park/California State Parks, Contra Costa County (no plans or corresp.)
- 8316 Lake Tahoe Fish Hatchery Park/California State Parks, Placer County (no plans or corresp.)
- 8317 Lake Tahoe Bliss Memorial and Rubicon Point Park/California State Parks, Placer County (no plans or corresp.)
- 8318 Calaveras Big Tree Region, Calaveras County, 1946
- 8319 California Redwood Park/California State Parks, Santa Cruz County (no plans or corresp.)
- 8320 Sunset-Seacliffe Beaches Park/California State Parks, Santa Cruz County (no plans or corresp.)
- 8322 Morro Strand/California State Parks, San Luis Obispo County (no plans or corresp.)
- 8323 Tule Elk Reserve/California State Parks, Kern County (no plans or corresp.)
- 8324 Carpinteria Beach/California State Parks, Santa Barbara County (no plans or corresp.)
- 8326 Manhattan Beach Park/California State Parks, Los Angeles County (no plans or corresp.)**
- 8327 Doheny Beach Park/California State Parks, Orange County (no plans or corresp.)
- 8328 San Clemente Beach Park/California State Parks, Orange County (no plans or corresp.)
- 8329 Mount San Jacinto Park/California State Parks, Riverside County, 1930, 1946
- 8330 San Pasqual Battlefield/California State Parks, San Diego County (no plans or corresp.)
- 8331 Mission Bay Park/California State Parks, San Diego County (no plans or corresp.)
- 8332 Silver Strand Park/California State Parks, San Diego County (no plans or corresp.)

- 8333 Huntington Beach & Newport Bay/ California State Parks, Orange County, 1929-1932
- 8334 Mill Creek Redwoods, Del Norte, 1939-1946
- 8335 Master Plan for Redwoods – Save the Redwood League/California State Parks, 1942-1955
- 8336 Calaveras Big Trees and Surroundings/California State Parks, Tuolumne County, 1945-1951
- 12011 San Francisco Parks, San Francisco, 1952

CITY AND REGIONAL PLANNING AND IMPROVEMENT PROJECTS

- 3370 San Diego Chamber of Commerce/San Diego Art Association, San Diego, 1902-1913
- 5354 Dominguez Estate/Torrance/Dominguez Estate Company, Los Angeles, 1910-1938**
- 5372 City Plan Commission, Los Angeles, 1910-1928**
- 5374 East Side Organization, Los Angeles, 1923**
- 5995 Study for Sloat Boulevard and Corbett Avenue Junction, Berkeley, 1914-1916
- 6090 Berkeley City Planning Committee, Berkeley, 1915-1917
- 6091 Berkeley City Planning Commission, Berkeley, 1914-1915
- 6092 Berkeley Civic Art Commission, Berkeley, 1915-1916
- 6257 Burlingame City California Garden City/Garden City Development/Cheney, Charles H., Burlingame, 1915
- 6467 San Jose City Plan, San Jose, 1916
- 8010 City of Long Beach/Long Beach Park, Long Beach, 1922-1933**
- 8022 Monterey Peninsula Regional Plan, Monterey, 1923-1930
- 8028 Town Planning/Santa Barbara, City of, Santa Barbara, 1898-1925
- 8031 Santa Barbara Plaza/De La Guerra Plaza, Santa Barbara, 1923-1924
- 8034 Santa Barbara, Santa Barbara (no plans or corresp.)
- 8100 Los Angeles County – General, Los Angeles, 1901-1955**
- 8103 Los Angeles City and County Parkway/Los Angeles County and City Park System, Los Angeles, 1893-1930 (note project began with plans before Olmsted Brothers)**

SUBDIVISIONS AND SUBURBAN COMMUNITIES

- 5219 Beverly-Arnaz Land Company, Los Angeles, 1939-1940**
- 5260 Lovdal Manor/Wood and Tatum Company, Sacramento, 1911-1919
- 5352 Marston, George W., San Diego, 1910-1913
- 5491 Los Angeles Investment Company, Los Angeles, 1911-1912**
- 5658 Westgate Park Land Company/Mason-McDuffie/St. Francis Wood, Berkeley, 1912-1937
- 5887 Arlington Heights, Santa Barbara, 1923
- 5945 Lakeshore Highlands/Wickham Havens/Sather Tract/Leimert, W.H., Oakland, 1906-1933
- 5950 Palos Verdes/Palos Verdes Syndicate, Palos Verdes, 1909-1948**
- 6147 Moore, W.M. Subdivision, San Diego, 1915
- 6338 San Francisco Exposition Site Subdivision, San Francisco, 1916
- 6485 Monterey Boulevard/Westgate Park Company/Residential Development Co., San Francisco, 1916-1917

- 8000 Edwin Jones Subdivision near Los Angeles, Los Angeles, 1922**
- 8001 Bear Lake Subdivision, Los Angeles, 1922**
- 8002 Pacific Palisades/Pacific Palisades Association, Los Angeles, 1922-1929**
- 8036 Benmar Hills/Southern California Corporation, Burbank, 1918-1943**
- 8045 Alta San Rafael Co., Pasadena, 1924-1935**
- 8050 Galbreath, George W./Shadin Hills, San Bernardino, 1925-1927
- 8066 Alta San Rafael Co./Mason, W.S., Pasadena, 1926-1927**
- 8080 West Rancho Aguajito/Subdivision for Duncan McDuffie, West Rancho Aguajito, 1926
- 8084 Clark, Walter G./Meade Tract, Los Angeles, 1924-1933**
- 8201 Hobart Estate/Subdivision, Lake Tahoe, 1926-1928
- 8205 Nutting, E.M./Laughlin Park Height, Hollywood, 1927-1928**
- 8257 Pismo Beach Sales Co., Pismo Beach, 1926-1935
- 8259 Rancho los Alamitos Mesa/Bixby Mesa/Bryant Bixby Subdivision, Long Beach, 1923-1936**
- 8265 McNulty, J.A., Los Angeles, 1932-1934**
- 8268 Hillside Gardens, Los Angeles, 1933**
- 8269 Southern California Homes Gardens, Southgate, 1933-1934**
- 8271 Monterey Terrace Homes Gardens, Monterey, 1933-1935
- 8273 Sherman Oaks Subdivision, San Fernando Valley, 1936**
- 8274 Imperial Western Tract/Leimert, W.H./Westmore Park Tract, Los Angeles, 1937-1938**
- 9278 Park Hills/McDuffie Subdivision, Berkeley, 1937-1940

COLLEGE AND SCHOOL CAMPUSES

- 1032 Stanford, Leland, Jr. University, Stanford, 1908-1944
- 2047 University of California, Berkeley, 1903-1949
- 5435 Union High School/Nordhoff Union H.S., Ventura County, 1910-1912
- 5488 Thacher School, Nordhoff, 1912
- 8029 Santa Barbara High School, Santa Barbara, 1921-1924
- 8035 Mills College, Oakland, 1923, 1945
- 8051 Malaga Cove School, Palos Verdes, 1925-1946**
- 8087 Redondo Union High School, Redondo Beach, 1928-1933**
- 8238 Miraleste School, Palos Verdes, 1928-1933**
- 8250 Mount Tamalpais Boys School, San Rafael, 1927, 1930
- 8263 University of California, Berkeley, 1925
- 8266 International House, Berkeley, 1933-1935

GROUND OF RESIDENTIAL INSTITUTIONS (Mental institutions, hospitals, military housing, asylums)

- 8011 Long Beach Hospital, Long Beach, 1922-1924**
- 8270 Good Hope Clinic Garden/Bryant, E.A., Dr./Bryant, Susanna Bixby, Mrs., Los Angeles, 1933-1934**

GROUNDS OF PUBLIC BUILDINGS

- 5489 Ventura County Building, Ventura, 1911-1912
- 6600 Oakland Municipal Building/Oakland Municipal Auditorium, Oakland, 1913-1917
- 8030 Santa Barbara City Hall Garden, Santa Barbara, 1923-1924
- 8049 Jacks, Margaret/Old Pacific Building, Monterey, 1924-1931
- 8076 Burbank Civic Center, Burbank, 1926-1928**
- 8206 Riverside Municipal Auditorium and Soldiers Memorial, Riverside, 1928
- 8237 Palos Verdes Library, Palos Verdes, 1913-1933**

PRIVATE ESTATES AND HOMESTEADS

- 3683 Olmsted, F.L.-Gill House, San Francisco, 1945
- 3684 Olmsted, F.L. House, Palo Alto (no plans or corresp.)
- 5351 Sharon, Frederick W., Menlo Park, 1912
- 5487 Cravens, John S., Pasadena, 1912-1915**
- 5830 Cowles, W.H./W.M.S. Cowles, Santa Barbara, 1913-1928
- 5883 McDuffie, Duncan, Berkeley, 1912-1939, 1950
- 5886 Merritt, Dr. Ema, San Francisco, 1913
- 5994 Harris, N.W./Chancellor, Dr./Oak Knoll, Pasadena, 1911-1914**
- 6087 Tompkins, P.T., Berkeley, 1915
- 6212 McDuffie, Sophia B., Berkeley, 1915
- 6356 Pittsburg/Davison, Henry P./Hegermann, Werner/McDuffie, Duncan, Pittsburg, 1916
- 7048 Mead, William, Hollywood, 1922-1928**
- 7085 McDuffie, Duncan, Carmel, 1922-1934
- 8005 Patterson, R.L., San Carlos, 1922-1923
- 8020 Jacks, Lee Miss/Rancho Aguajito, Monterey, 1923-1936, 1945
- 8021 Lowe, Mrs. Edward Jr., Berkeley, 1923
- 8023 Vanderlip/Filirum Corporation/Villetta Narcisca/Vanderlip, F.A., Palos Verdes, 1924-1931**
- 8024 Robbins, Mrs., San Pedro, 1923**
- 8026 Swift, Henry, Berkeley, 1923-1924
- 8027 Webster, E.E., Redondo Beach, 1923**
- 8038 Hayter, Richard, Hollywood, 1923**
- 8039 Warren, T.W., Pasadena, 1923**
- 8041 Schipkowsky, Rudolph, Los Angeles, 1924**
- 8042 Campbell, Ella D., Los Angeles, 1923-1924**
- 8044 Cameron, A.E., Palos Verdes, 1924-1926**
- 8046 Olmsted, F.L., Palos Verdes, 1925-1940, 1945, 1951**
- 8056 Nelson, William P., Montecito, 1925
- 8058 Barrett, W.R./Barratt, Whitford R., Palos Verdes, 1925-1926**
- 8060 Benedict, H.E., Palos Verdes, 1926-1930**
- 8061 Harden, E.W., Palos Verdes, 1925-1933**
- 8062 Gard, E.W., Palos Verdes, 1927**
- 8069 Bowles, P.E./McDuffie, Duncan/Bowles Property, Oakland, 1912-1926
- 8070 Schreiber, Mrs. Oliver, Palos Verdes, 1927**
- 8071 Bloch, J.L. Dr., Palos Verdes, 1926-1928**
- 8079 McDuffie, William, Montecito, 1927-1929

- 8081 Parkford, E.A., Santa Barbara, 1916-1930
- 8082 Bryant, Mrs. Ernest Albert, Long Beach, 1926-1935**
- 8085 Bixby, Frederick Mrs., Long Beach, 1923-1934**
- 8086 Buchanan, James E., Redondo Beach, 1927-1930**
- 8088 Woods, Paul M./Keith, Mrs. Margaret, Palos Verdes, 1924-1936**
- 8089 Haggarty, J.J., Palos Verdes, 1927-1931**
- 8095 Jacks, Margaret/Castro Adobe, Monterey, 1927
- 8096 Sutherland, W.M., Palos Verdes, 1927-1929**
- 8098 Dibbler, B.H., Ross, 1928-1932
- 8210 Lane, Mr. and Mrs. Fulton, Palos Verdes, 1928**
- 8219 Stein, Dr. Otto J., Palos Verdes, 1928-1929**
- 8220 Smith, Dr. Ralph, Claremont, 1928-1930**
- 8222 O'Melveny, Harry W., Beverly Hills, 1928-1938**
- 8223 Hart, Mrs. Alden L., Long Beach, 1929-1930**
- 8225 Schwedtman, F. Charles, Palos Verdes, 1930-1933**
- 8226 Raleigh, W.W., Palos Verdes, 1929-1930**
- 8229 Levinson, E.D., Palos Verdes, 1929**
- 8233 Allison, D.C., Bel Air, 1929-1932**
- 8239 Rancho Santa Ana Botanic Gardens, Long Beach, 1928-1952**
- 8247 Livermore, Norman B., Ross, 1930-1932
- 8248 Chamberlain, Selah Mrs., San Mateo, 1930-1931
- 8251 Samuels, Mrs. Horner, Palos Verdes, 1930-1933**
- 8252 Phillips, J. Norman, Palos Verdes, 1930**
- 8258 Hammond, Mrs. L.C., San Mateo, 1930-1931
- 8244 Edwards, L.T., Los Cerritos, 1930-1931**
- 8253 Jergins, A.T., Long Beach, 1930**
- 8262 O'Melveny, H.W., Los Angeles, 1932-1933**
- 8264 Orrick, W.H., Pebble Beach, 1923-1935
- 8272 Bryant, Susanna Bixby, San Marino, 1935-1937**
- 8325 Pio Pico Mansion/California State Parks, Los Angeles County (no plans or corresp.)**

CEMETERIES, BURIAL LOTS, MEMORIALS AND MONUMENTS

- 6878 National Cemetery Association, Los Angeles, 1920**
- 8314 Marshall's Monument/California State Parks, El Dorado County (no plans or corresp.)
- 8315 Donner Monument/California State Parks, Donner County (no plans or corresp.)
- 9685 Mountain View Cemetery, Oakland, 1938-1949
- 12118 Mountain View Cemetery, Oakland, 1921

GROUND OF COMMERCIAL AND INDUSTRIAL BUILDINGS

- 5949 Spring Valley Water Company, San Francisco, 1913-1914
- 8235 Burbank United Airport, Burbank, 1929-1930**
- 8256 Sub-Station for Edison Co., Palos Verdes, 1930-1931**
- 8321 Custom House – Old Theater/California State Parks, Monterey County (no plans or corresp.)

COUNTRY CLUBS, RESORTS, HOTELS AND CLUBS

- 2394 Santa Catalina Island Company, Santa Catalina, 1903, 1919
- 8003 McCloud River Club, McCloud, 1922-1923
- 8063 Portugese Beach Club/Portugese Bend Beach Club, Palos Verdes, 1925-1926**
- 8093 Vista Valmonte Hotel/Hotel Vista Valmonte, Palm Springs, 1927-1932
- 8094 Palm Springs Golf Course, Palm Springs, 1925-1932
- 8097 Meadow Club of Tamalpais/Dibbler, Tamalpais, 1927-1929
- 8209 Hollins, Marion Miss/Pasotiempo Estates Co./Pasotiempo Golf Club and Estates Co./Santa Cruz Development Co., Santa Cruz, 1927-1937
- 8216 Morro Bay Vista, Morro Bay, 1925-1929
- 8254 California Club, Los Angeles, 1929-1930**
- 8255 Midwick Country Club, Montebello Park, 1929-1931**

ARBORETA AND GARDENS

- 8239 Rancho Santa Ana Botanic Gardens, Long Beach, 1927-1952**

EXHIBITIONS AND FAIRS

- 4051 Balboa Park/City Park/San Diego Exposition/Panama-California Exposition (1915), San Diego, 1910-1915, 1940-1948
- 5380 Panama-Pacific New York State Bldg. Exposition/ASLA, Exhibit of/San Francisco Exhibition, San Francisco, 1914-1915
- 8275 Cabrillo Exposition, Los Angeles, 1935-1938**

MISCELLANEOUS PROJECTS

- 1809 Save the Redwoods League, Berkeley, 1938-1954
- 8203 Hassler, Robert H. Polo Field, Serena, 1927-1929
- 8241 Redondo Beach, City of, (Oil leases), Redondo Beach, 1924-1931**

APPENDIX 2

PREVIOUSLY PUBLISHED PAPERS

While this thesis was under research, two articles were published and noted as follows:

1. O'Hara, Christine Edstrom. **"Early Sustainable Planning in Palos Verdes."** *Palos Verdes Bulletin* Fall 2016: 1-2. Print.

Note that formal permission to publish was given by Kim Robinson, Palos Verdes Bulletin editor.

2. O'Hara, Christine Edstrom. **"A Radical Vision for Palos Verdes Estates: Early Sustainable Planning on the West Coast."** *Eden: Journal of the California Garden & Landscape History Society* 19, no. 2 (Spring 2016): 3-7. Print.

Note that I hold the copyright to this essay, but Steven Keyton, Eden Editor, wrote "to the extent that California Garden & Landscape History Society holds any publication rights to the article, those rights are permanently granted to O'Hara."

Prior to undertaking this thesis, there was one other related publication, though I have drawn only minimally from it in Chapter 4:

3. O'Hara, Christine Edstrom. **"The Panama-California Exposition, San Diego, 1915: the Olmsted Brothers' Ecological Park Typology."** *The Journal for the Society of Architectural Historians* 7, no. 1 (March 2011): 64-81. © 2011 by the Society of Architectural Historians. Published by The University of California Press.

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PALOS VERDES BULLETIN

PUBLISHED BY THE PALOS VERDES HOMES ASSOCIATION 🌿 ESTABLISHED 1924 🌿 REPRESENTING PALOS VERDES ESTATES & MIRALESTE

EARLY SUSTAINABLE PLANNING IN PALOS VERDES

Written by Christine Edstrom O'Hara

"We believe it would be advantageous to do a great deal of landscape planting on lots and residence tracts before they are sold, especially ornamental trees and fruit trees, not only to assist in rapidly bringing large areas into attractive home-like condition, but because so many prospective purchasers know so little about the planting of residence grounds, especially in Southern California where the climate and soil conditions are unfamiliar to many."

– *Olmsted Brothers to W.H. Kiernan, October 1914*

Like many new residents to a community, the Olmsted Brothers landscape architecture firm and the original directors of design for Palos Verdes Estates had a considerable learning curve in understanding how to plan with the semi-arid Mediterranean ecology of Southern California. Their research began in 1914 by hiring a meteorologist and an agronomist to study the peninsula's weather patterns and rainfall as well as soil conditions.

Their third consultant was Louis Horner, who began propagating plants at a nursery in what is now Lunada Bay. Plants from this nursery were sourced to create the lush design of the community. To encourage use of these drought-tolerant plants, new owners could purchase them from the nursery at cost.

Prior to the development of Palos Verdes, farmers in the area had relied on dry farming—an irrigation technique of using only fog and natural rainfall for their crops. While some of the native plants were successfully propagated, others needed more water.

For those, Horner pulled rainwater from the roof of nearby ranch buildings to supplement irrigation.

With a subdivision development, water was needed primarily for drinking but would also be used judiciously for landscape purposes.

From 1914 to 1922 Olmsted firm members traveled between their East Coast office and Palos Verdes, with most of the drawings completed at the main office in Massachusetts. What made this project more unusual than any other Olmsted Brothers design was a new contract requirement by developer Frank Vanderlip that firm principals be in residence while the project was under design and construction.

In October 1922 the firm opened its first West Coast office—in the Gardner Building in Malaga Cove Plaza. The Olmsted Brothers were able to not only influence the community's taste and control the long-term development of the city but also combine their professional and personal values into the design.

WATER-SAVING TACTICS

The Olmsted firm used contemporary techniques to create verdant landscapes in Palos Verdes, working with the typically low rainfall while also offering

effective methods for water management during periods of drought and flood.

Palos Verdes experienced a surge in construction during the 1920s. A long period of drought occurred in Los Angeles from 1917 to 1926, and these conditions offered an opportunity to test ideas in landscape construction and design for the new community.

Since much of Palos Verdes had steep slopes, there were two options: work with the existing slope or terrace it. If the slope was to remain steep, the Olmsted firm would add "cut-off ditches" or small canals to direct the water to ravines when runoff from winter storms became problematic. Moving the water to open space was an additional way the firm maintained existing hydrological patterns with the extra advantage of water percolating back into the soil.

Contour grading was another option that resembled the natural terrain. This design method created small dips along the slope for stormwater to be caught and held in basins. Planting at the base of slopes allowed plants to capture the runoff and use it for irrigation, and any trees planted on slopes

Continued on page 2



Palos Verdes streets were designed to naturally divert stormwater so storm drains would not be necessary.

Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site

DEAR PVHA MEMBERS,

Welcome to the new edition of the *Palos Verdes Bulletin*. Originally published from 1924 through 1931, the *Bulletin* was discontinued because of the economic circumstances of the Great Depression—as the Palos Verdes Homes Association needed to reign in spending in the face of a newly dried up real estate market. During those early years, the *Bulletin* was distributed to homeowners, lot owners and prospective lot buyers and homeowners. It was filled with articles detailing the activities of the PVHA, the Art Jury and information about the development of Palos Verdes Estates. The PVHA again published the *Bulletin* between 2000 and 2009.

Recently the PVHA has been encouraged to provide more information to our members about our activities. This publication and future ones will focus on an outreach to members, information of the activities of your association and items of historical interest. We hope that you will enjoy reading the *Palos Verdes Bulletin* and become more aware of the PVHA and its mission to support the continued development of the community we all love.

Phil Frengs,
PVHA President

Continued from page 1

included a small basin around the trunk with the same intention of water retention.

When planting slopes, the Olmsted firm often used evergreen groundcovers that held topsoil from eroding. While there were many options for planting on more shaded east- and north-facing slopes, the Olmsted firm noted that their biggest success for hot sites—those facing west or south—was the plant *Atriplex* or saltbush, which could survive with no additional irrigation.

Terracing was another typical landscape feature in the 1920s, with the walls often clad in local Palos Verdes stone. Terracing not only provided more flat soil for patios or planting, but its ecological benefit reduced topsoil loss and held water. The Olmsted firm sought to establish a sense of place with each of their designs, and the Palos Verdes stone walls materially connected the project while addressing topography and water issues.

In Palos Verdes, street designs were utilitarian, and they had a double function of managing stormwater. Frederick Law Olmsted Jr. wrote in 1927 that street locations were designed with “constant regard for the effect on abutting property and for the handling of stormwater, the intention being to divert the latter at frequent intervals into canyons and other natural drainage channels reserved for this purpose, so as to avoid any general necessity for storm drains other than culverts.” Olmsted created a supplemental erosion control measure through native planting, with stormwater providing the sole means of irrigation for these plants.



A terraced area of La Venta Inn, with gardens designed by the Olmsted brothers.



Palos Verdes Homes Association Photograph Collection, palosverdeshistory.org

Though one might assume that creating permeability is a more contemporary landscape approach, the Olmsted firm looked for ways to have water drain into soils and reduce flooding. Permeable materials used in commercial and residential design included decomposed granite paths, as well as gravel paths and patios.

LANDSCAPE DESIGN IN THE EARLY 1900S

Based on Louis Horner's propagation experiments, a 1916 inventory of successful nursery plants as well as plant lists gleaned from the Olmsted Brothers' residential projects offer continued contemporary suitability. Images of the firm's commercial designs reveal how lushly these drought-tolerant plants were grouped—both practically, for minimization of water loss and reduction of weeds, as well as aesthetically, for colorful design.

Grass lawns were minimized in the Olmsted plans—an unusual practice during the 1920s—with small panels of grass that would not require much water. Often located within inner courtyards, these small spaces allowed a variety of activities but did not become the focus of the landscape planting.

Workers at the Palos Verdes Nursery in Lunada Bay tend to plants beneath a “cold frame,” circa 1924.

The timing for planting the landscape in Palos Verdes made a large difference. As experts relayed to the firm, planting was best done in the fall—especially after the first rain that truly wet the ground. Fall was typically cooler, and plants preferred natural rainfall to the potable water that they typically received through irrigation systems. (Rainwater has more nitrogen in it—a natural fertilizer for plants.) Planting in the fall used the free winter rains to establish plants and develop deeper root systems by spring.

Louis Horner wrote to the Olmsted Brothers in 1915: “I am having no difficulty with the majority of our natives ... I am convinced that the soils are very good where the drainage and the preparations of them is carefully taken care of.” Thoughtful landscape design, including plant choices, topography, and choosing the right time of year, was a customary construction method by the Olmsted Brothers that continues to be a wise water-saving tactic today.

On the faculty of California Polytechnic State University San Luis Obispo, Christine O'Hara lectures on landscape preservation and its application to sustainable landscape design and construction. For more information about Christine and a successful drought-tolerant plant list from the 1920s, visit PVHA.org.

A Radical Vision for Palos Verdes Estates

Early Sustainable Planning on the West Coast

Christine Edstrom O'Hara



Palos Verdes Estates was the largest new American town designed in the 1920s. The Olmsted Brothers landscape architecture firm of Boston, city planner Charles Cheney, and Pasadena architect Myron Hunt planned the new community on a spectacular coastal site in southern Los Angeles County. The Palos Verdes Project was conceived as early as 1914, and it developed during a period of critical regionalism when its creators sought to express not only American values, but also to create a distinctly Californian design. Their aim was to showcase the native California landscape and to demonstrate a new approach to design in architecture and planning specific to the history and ecology

of California. With an initial design area of 16,000 acres, the Palos Verdes Project was the most extensive suburban community commission the Olmsted Brothers firm ever undertook, and it became a long-term project in which the firm continued in an advisory role through 1948. Upon seeing Palos Verdes for the first time, Frederick Law Olmsted, Jr. is reported to have remarked:

How often are men given such an almost untouched great area...the cliffs, the beaches, where the ocean once was, the canyons, the hills and the ocean. May we who are now responsible, place parks, open

spaces, roads, not for racing, but to look at the beauty, and may the generations who follow keep this in their minds and plans.¹

The Olmsted Brothers landscape architecture firm was named after John Charles Olmsted (1852-1920) and Frederick Law Olmsted Jr. (1870-1957), the children of renowned landscape architect Frederick Law Olmsted Sr., who retired from practice in 1896.² Along with both brothers, firm associate James "Fred" Dawson (1874-1941) managed their Pacific Coast projects. While the firm was prolific, ultimately designing or consulting on over 4,000 projects throughout the United



States, Palos Verdes Estates was not simply a commission, but became the personal home of both Olmsted Jr. and Dawson. In a 1922 contract, developer Frank Vanderlip ensured a fluid oversight of Palos Verdes' design and construction phase when he required that "during the continuance of this contract at least one member of the firm of the Olmsted Brothers shall at all times be resident at or near Palos Verdes... and Frederick Law Olmsted and James F. Dawson shall both be so resident and available for as much of the time as continuously as they find necessary for the proper direction and prosecution of the work."³ In October 1922, the firm opened its first West

Coast office in Redondo Beach. Through their residence during the 1920s, Olmsted Jr. and Dawson were able not only to influence the community's taste and control the long-term development of the city, but also to infuse their professional and personal values into the design.

Each designer, as well as the developer of Palos Verdes, had a specific concept and agenda for the community's design. In response to the site's southern Italian ambience, Vanderlip envisioned an exclusive residential community based on Mediterranean design. Similarly, the Olmsted Brothers intended the design to

be in accord with the semi-arid Southern California climate. Incorporating ideas of regionalism first tested by Frederick Law Olmsted Sr. at Mountain View Cemetery (1865) in Oakland and at Stanford University (1883), their vision followed the firm's unbuilt proposal for the 1915 Panama-California Exposition in San Diego, a design that endeavored to showcase the native California landscape. City planner Charles Cheney helped develop the Palos Verdes' villages, mixing Mediterranean prototypes with new American planning models. Attempts to develop a regional California architecture based on the missions (Mission Revival Style) began in the



late 19th century. By the 1920s the style, which borrowed from Europe and Mexico and incorporated Italian, Moorish, Spanish, and Mexican elements, had developed into California Mediterranean or Spanish Colonial Revival. Myron Hunt called it “Californian,” and as chief architect at Palos Verdes, he waged a campaign to have the Californian style recognized as the official style for the new community.

As Directors of Design, the Olmsted Brothers began with a rigorous study of the new region in an attempt to understand the complexities of the semi-arid and steep site. Principal Fred Dawson began intensive

research in January 1914, hiring outside consultants to create detailed topography maps and to conduct hydrology, soils, and temperature studies in Palos Verdes. Dawson contacted California native plant expert Theodore Payne regarding the hardiness of particular plants in the region and purchased seeds from Payne’s store. Propagation of appropriate plants suitable to the climate was made a priority. An on-site nursery was established, and nurseryman Louis Horner was hired to care for and propagate plants full time.⁴ Horner experimented with propagation techniques, including dry farming, and also gathered seedlings in the wild as starters

for his nursery stock of acclimated plants.

Palos Verdes became the largest unirrigated development in the country at the time through the use of regionally appropriate plants. Realizing that new California residents might not appreciate the dry native

Above (left to right): *On horseback at Malaga Cove, north entrance, 1926. Malaga Cove School, an example of California architecture designed by architecture firm Allison & Allison, 1928. All historic photos courtesy of Palos Verdes Library District Local History Collection.*



and Mediterranean plants, John Charles Olmsted wrote:

We believe it would be advantageous to do a great deal of landscape planting on lots and residence tracts before they are sold, especially ornamental trees and fruit trees, not only to assist in rapidly bringing large areas into attractive home-like condition, but because so many prospective purchasers know so little about the planting of residence grounds, especially

in Southern California where the climatic and soil conditions are unfamiliar to many.⁵

Not only did the firm reduce lawns in their residential design, but commercial areas and parks were lushly planted primarily with native and adapted plants. Park designs drew from Mediterranean regions, such as Moorish prototypes for Farnham Martin Park with its copious amounts of local Palos Verdes flagstone and fountains. Peripheral understory plantings and plants in pots comprised the vegetation, and lawns were limited to spaces for recreational needs. The chosen plant palette blurred the design into the borrowed landscape. The intentionally restricted use of water—in fountains, pots, and the unirrigated adjacent native landscape—constituted a non-pastoral park design for a low-water region.

As a resident of Palos Verdes, Frederick

Law Olmsted Jr. understood the normal patterns of flood and drought in Southern California, and designed in a way to accommodate both conditions. While the planting design was a low-water one, storm water management for heavy inundations was also a priority. Open space in Palos Verdes was carved out of the valuable hillside and shore-bluff lots, fulfilling multiple functions. Storm water drainage flowed into open space, minimizing the need for storm drains by diverting water into canyons and other natural drainage channels. Preplanned open space not only preserved the native California landscape, but also mitigated the effects of the region's heavy winter rains.

The design of Palos Verdes was completely driven by the existing landscape and climatically compatible forms of urban design and architecture. Calling its architecture and landscape architecture "Californian,"

Above (left to right): *View along Via Campesina, with the George and Florence Gibbs residence visible at near right, 1929.*

La Venta Inn, built in 1925 to entertain realtors and prospective landowners, later served as the sales office for Palos Verdes Estates and was an architectural prototype for the new community.



Palos Verdes Estates exemplified a regional approach in its architecture, plant use, water management, and integration of buildings and landscape. While the design expressed new standards and ideals in modern American subdivision planning, at the same time it created a community that functioned ecologically with the site. Mixed among the “appropriate” aesthetics were new American needs and values—for the automobile, active recreation, and open space within the city. It was a radical approach to design in a new region and an early example of sustainable design on the West Coast.

Author's Note

Special thanks for the exceptional archival support to Monique Leahey Sugimoto, Archivist and Adult Services Librarian at the Palos Verdes Library District. The local history collection at the Palos Verdes Peninsula Library contains a rich photographic assemblage of historic imagery, from early construction of Palos Verdes to later built projects, and is a goldmine for researchers.

Endnotes

1. Dwight L. Oliver, *Landscape Architecture, Frederick Law Olmsted, Jr. and Frederick Law Olmsted, Sr.: Extraordinary Careers* (Oakhurst, CA: Nelson Press, 1991), 7. Oliver quoted the late Mrs. Romaine C. Martin, who in the 1920s arrived in Palos Verdes with her husband Farnham Martin, an associate with the Olmsted Brothers firm in charge of all horticultural oversight. Mrs. Martin is credited for remembering this conversation with Frederick Law Olmsted, Jr.

2. According to Susan L. Klaus in “All in the Family: the Olmsted Office and the Business of Landscape Architecture,” *Landscape Journal* 16, no. 1 (Spring 1997), when John Charles Olmsted died in 1920, Olmsted Jr. maintained the Olmsted Brothers’ name “both for sentimental and business reasons, believing that the many changes in the name of the Olmsted office in the past were rather unfortunate” in preserving the firm’s historical identity (Olmsted Jr. to Arthur C. Comey, March 24, 1920, Job #20-(3), Records of the Olmsted Associates, Manuscript Room at the Library of Congress).

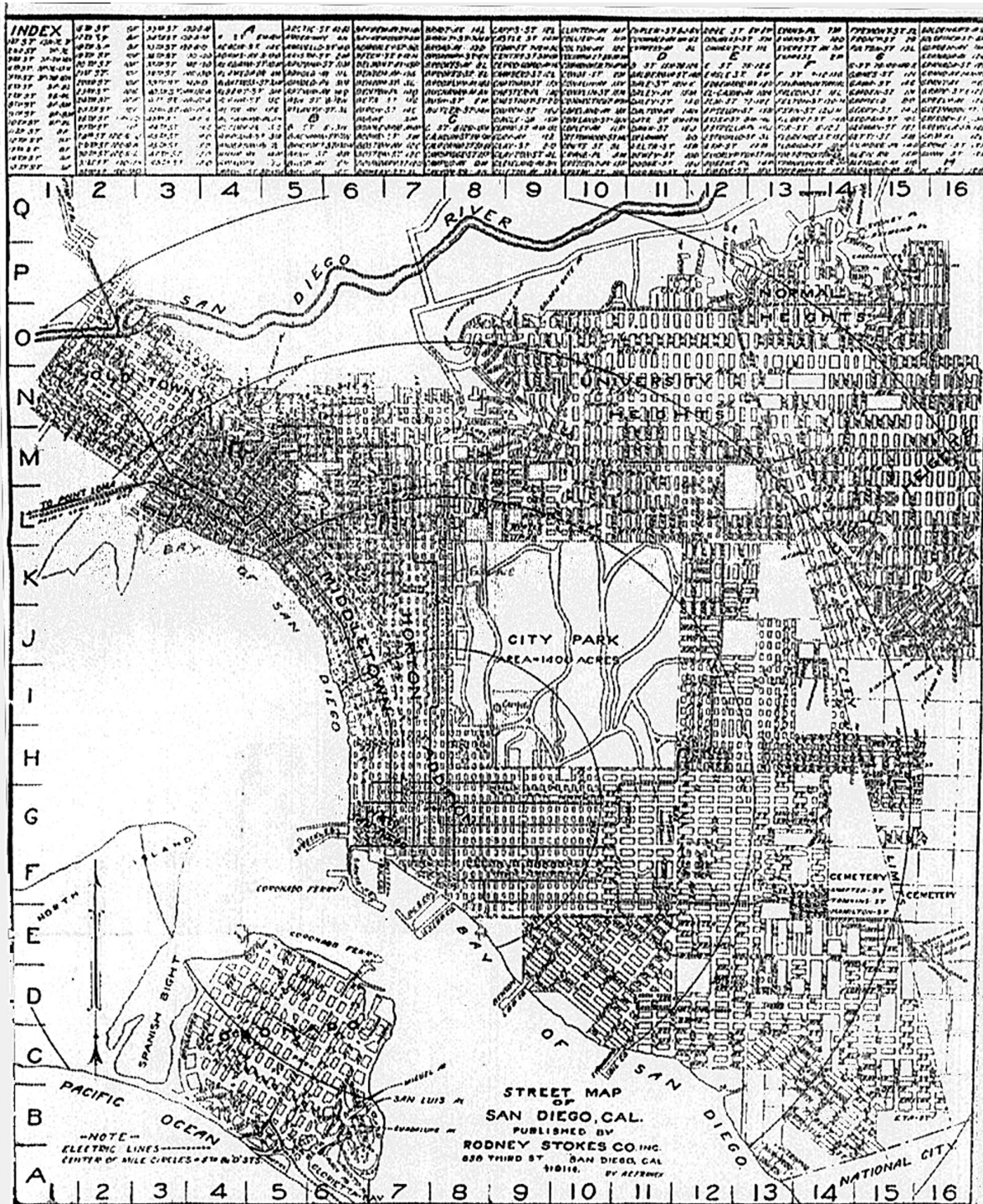
3. Draft of Proposed Contingent Agreement between Olmsted Brothers and the Trustee, 9 October 1922, Job #5950, Records of the Olmsted Associates, Manuscript Room at the Library of Congress.

4. Describing that work to W.H. Kiernan, Vanderlip’s Western representative, the Olmsted Brothers wrote that the plantsman was “to study local plants and conditions and to collect and raise nursery stock chiefly of hardy native kinds of shrubs and trees requiring little or no care after they are established for restoring the beauty of arroyos and precipitous hillsides which have become more

or less bare and ugly in some places owing to pasturing, fires and other interference by man.” (John Charles Olmsted. Letter to Kiernan, 25 September 1914, Job #5950, Records of the Olmsted Associates, Manuscript Room at the Library of Congress.)

5. John Charles Olmsted. Letter to W.H. Kiernan, 19 October 1914, Job #5950, Records of the Olmsted Associates, Manuscript Room at the Library of Congress.

Christine Edstrom O’Hara is an Associate Professor in Landscape Architecture at California Polytechnic State University, San Luis Obispo. A long-time CGLHS member, she earned a B.A. from Stanford University and an MLA from the University of Washington, and is now a PhD candidate in Landscape Architecture at the University of Edinburgh. Her research focuses on the California designs of the Olmsted landscape architecture firm—from Frederick Law Olmsted Sr. to the work of his sons, the Olmsted Brothers.



Houses and Lots in All Parts of San Diego on F
Ranch Land from \$50 per Acre and U

NORTONIA FRUIT LAND
OUR SPECIALTY: ONE TO FIVE AC

Figure 1 Norton Land Company, map of San Diego, 1911 (Los Angeles City Library City)

The Panama-California Exposition, San Diego, 1915

The Olmsted Brothers' Ecological Park Typology

CHRISTINE EDSTROM O'HARA
California Polytechnic State University,
San Luis Obispo

The Olmsted Brothers' unbuilt proposal for the 1915 Panama-California Exposition was a model of "appropriateness" in California landscape design. Built in City Park, now known as Balboa Park (Figure 1), the design was centrally located in San Diego. The firm's primary design objective was to respond to the ecology of Southern California, respecting the natural landscape, while seeking to define a distinctive park typology for the region. The project also embodied a romantic approach to Spanish city planning and articulated an imagined ideal Hispanic identity for regional architecture, site design, and material and plants selection. The Olmsted Brothers firm presciently conceived their landscape plans in direct response to the site, client, and social context of the period. The proposal provided an outlet for showcasing their philosophy of grounding design in regional aesthetics and ecological function.¹

Olmsted Brothers on the West Coast

Frederick Law Olmsted, Sr. retired in 1896, and his legacy of genius loci, respecting the spirit of the place, continued through the designs of his stepson John Charles Olmsted

(1852–1920) and son Frederick Law Olmsted, Jr. (1870–1957), now working as the Olmsted Brothers.² By 1911 the firm divided projects regionally, with Frederick Jr. and Percival Gallagher overseeing work on the East Coast; John and James Frederick "Fred" Dawson primarily worked on the Pacific coast, in the South, and in the Midwest.³ Although the usual practice was for one brother to act as principal on a project, the brothers often collaborated.⁴ The design for the Panama-California Exposition was a partnership between John, Frederick Jr., and Fred Dawson, each bringing unique skills to the project.

John Olmsted had worked closely with his stepfather amassing experience in design as well as planning. His colleagues and apprentices praised his ability to solve complex design issues with "artistry and practicality" while protecting the natural features of the site. Like his stepfather, he was committed to educating communities and clients about the long-term benefits of careful, comprehensive planning.⁵ John worked collaboratively with architects, urging them to accommodate the building to its site.

Frederick Law Olmsted, Jr. followed his father's design aesthetics and philosophy, with a deep concern for land conservation, never resolving design problems solely from a map. Rather, he visited the landscape, studying its context, existing plants, soil, and geologic foundations. His love and respect for nature were not only for its sensual effects, but as a planner, he understood the long-term effects of landscape management.

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A lifelong member since 1905 and associate partner with the Olmsted Brothers, the design influence of Fred Dawson (1874–1941) has attracted little scholarship. He was principally responsible for the firm's West Coast designs, often focusing on the horticultural elements. His work included private gardens, public parks and park systems in Portland, Seattle, and Spokane, as well as colleges and state capitols.⁶ He closely collaborated with John on both the Seattle (1909) and San Diego expositions (1911), establishing the Olmsted Brothers' West Coast office in Redondo Beach in 1920.

The Olmsted firm's interest in California brought with it interesting design challenges, an opportunity to enact progressive planning ideas, as well as underscored each principals' approach to landscape architecture. Designing for the Panama-California Exposition, the Olmsted Brothers could also reverse the trend of recent fairs' international style by embracing regional identity.

Establishing Regional Identity

California regionalism—the beginning of identification with the region—began in earnest in the late 1880s as a continuation of the East Coast revival through influential books such as Helen Hunt Jackson's *Ramona* (1884). In traveling west, Jackson visited Rancho los Camulos near Piru, California, which to an East Coast resident exemplified Old California design. Jackson, historian May Brawley Hill stated, “helped to create a mythical California [that was] appropriated by incoming American residents as a way of establishing a regional identity and collective history where roots were shallow.”

By 1890 Mission Revival had become the quasi-official style of California, found in train stations, college campuses, and homes. While this type of architecture responded to its locale, with shaded arcades and interior courts, it also provided romantic identity. In 1897 Eliza Otis, wife of *Los Angeles Times* owner Harrison Gray Otis, wrote about Mission Revival: “Among these first class residences an old-new type is rapidly growing in favor. It is the modernized adobe, of the old Spanish style of architecture, with the beautiful patio, or court in the center.” These romanticized design associations with old Spain conveniently provided the invented identity sought by new residents.

In *The Simple Home* (1904), influential writer Charles Keeler promoted relating architectural and material design to the landscape and, in particular, to California's favorable weather for outdoor living space. He advocated natural style, local materials, native plantings, and creativity in sitting amid the beauty of the surrounding land. Because of the benign climate, a vast range of plants, from native to alpine

to exotic tropical, could be used in gardens. Horticulturalist Kate Sessions, one of the state's first environmentalists and conservationists, believed that plants should differentiate Southern California from even the rest of the state; her San Diego nursery offered an inspiring mix of native and adapted plantings along with microclimate information to ensure their success.

As with architecture, California's Mediterranean climate would suggest similar landscape typologies from Mediterranean regions like southern Spain. However, East Coast and Midwestern immigrants to California continued to struggle with landscape design. California historian Kevin Starr has explained that its Mediterranean landscape and climate supported the vision of California as a regional civilization. This rich aesthetic potential extended to California's cities and parks, which could be re-interpreted with innovative planning, architecture, technology, and design for the automobile.

Panama-California Exposition, 1910–11

On 9 July 1909, G. Aubrey Davidson, president of San Diego's Chamber of Commerce, announced that since the Panama Canal would be completed in 1915 and San Diego was its nearest American port, the city should host an exposition to celebrate the event. San Diego offered a beautiful bay and much parkland, and the exposition would provide buildings for the city park while boosting the local economy. With a population of 40,000 in 1910, San Diego would be the smallest city in history to host a world's fair. To distinguish itself from San Francisco's Panama-Pacific Exposition that year, San Diego's fair would have a regional focus, highlighted by its architecture, landscape architecture, and planning. The groundbreaking occurred on 19 July 1911, symbolically reenacting the founding of the city in July 1769 by Franciscan monk Father Junipero Serra, who had established the first Spanish mission in California.

Fourteen hundred acres had been purchased and preserved by early San Diego land speculator Alonzo Horton in the late 1870s for what was called City Park; the exposition was sited at the southwest corner. In 1910, as part of a general bestowal of Hispanic names on familiar places, it was named Balboa Park, after Vasco Núñez de Balboa, the first European to see the Pacific Ocean from a hill in Panama. D. C. Collier, director general of the exposition, suggested its architectural style and theme, “the progress of the human race.” Mission City was its original title; its exhibits would showcase the Southwest and Latin America. In 1911 Colonel Collier presented the plan before the National Committee on Industrial Arts and Expositions in Washington, D.C.:

In its architecture, our exposition is to be different from any other ever held; it will be unique. It is to be of the old mission or Spanish colonial style, such as is to be found in the great cathedrals of the City of Mexico and the old missions of California . . . We have decided to make this exposition different in character from any other. In fact, from its earliest conception . . . it would be an exposition which would work out the problems and demonstrate the resources, possibilities, and future of the great Southwest and of Latin America . . . the chief attraction would be the reclamation, irrigation and forestation of arid lands.⁷

The design rejected the model of Chicago's 1893 Columbian World Exposition, but was inspired by Spanish urban design: "In carrying out the general idea of the exposition, we have not only adopted old mission architecture, but every gate has a Spanish name, as has every lake and garden and road and bridge, and all buildings will be connected by mission arches."⁸ An opening on New Year's Eve 1914 was selected so "people [could] come from the snows and blizzards of the North and sleep in absolute comfort in the winter."⁹

Serving on San Diego's Panama-California Exposition board was George Marston, whose tireless influence of the city's aesthetic and economic improvement tapped its Spanish and Mexican history. He envisioned a large Spanish plaza as the heart of downtown, with a formal landscape of fountains and statuary. The area from the bay to the park, extending twelve blocks between Date and Elm Streets and from Fifth to the waterfront, would improve downtown, with businesses and parks for the community.¹⁰

Prominent San Diego architect Irving Gill (1870–1936), who had designed board member George Marston's home in 1904–5, was selected for his expertise in modern Mission architecture; he would offer a radical departure from neoclassical style of previous world's fair architecture. Kate Sessions had already begun extensive research on drought-tolerant plants to showcase regional horticultural design.

The Olmsted Brothers' firm was chosen because of their successes with the 1906 Lewis and Clark Exposition in Portland and the 1909 Alaska-Yukon Exposition in Seattle. Moreover, the firm—and family name—had a national reputation and its projects maintained their value after completion. Twice before the firm had been considered for major civic improvements in San Diego: the 1905 design for City Park and the 1907 comprehensive city plan. Working in San Diego would allow the firm to continue its exploration of new design approaches in the arid West. Frederick Law Olmsted, Sr. argued that Southern California gardens and landscapes usually imitated East Coast and northwestern

European designs, with only small concessions for its subtropical climate; instead he advocated for an entirely new approach to the region based on the ecological specifics of the site. In June 1907, Olmsted Brothers principal Percival Gallagher characterized the firm's approach for San Diego's City Plan to George Marston: "Frederick Law Olmsted always felt that there were great and most interesting opportunities to be made in the landscape problems . . . of southern California . . . where irrigation plays a large factor." He continued that an East Coast approach was "unlikely to lead to the kind of beauty most fitting and interesting to the local conditions."¹¹ Ultimately, the Olmsted firm was not chosen for either project; John Nolen was hired for the city plan, while the respected New York landscape architect Samuel Parsons designed City Park.¹²

Parsons had served as superintendent of planting for Central Park in 1892, New York superintendent of parks from 1894 until 1897, and landscape architect for Greater New York in 1901–11.¹³ Like the senior Olmsted, for whom Parsons worked at Central Park, he was determined not to repeat a formulaic approach, but to adapt park design to the arid climate. For San Diego's City Park, he drew ideas from Prince Hermann von Pückler-Muskau's work at Muskau Park in Prussia (1815) by incorporating outside views into the park setting.¹⁴ Rejecting Frederick Law Olmsted's philosophy of screening the city to create an interior focused, naturalistic design, Parsons' park design would use the views of mesas, ocean, and mountains to bring the borrowed views into the setting.¹⁵

Parsons prepared two formal plans for all 1400 acres of San Diego's City Park, in 1905 and 1910 (Figure 2); the later version was amended to reflect John Nolen's 1908 city plan. In them he insisted that landscape architects should design to respect the contours of the topography rather than regrade the land. He also discouraged creating streams where there was no natural flow of water, and making lakes by filling natural valleys and canyons. His plans showed peripheral roads with trees defining the borders; palms and other drought-tolerant trees were arranged in harmonious groupings by foliage and color scheme.¹⁶ His paths and roads within the park followed the natural contours, edging canyons and opening in surprising views. Grass lawns were limited to small plots at the park entrances, and he preserved much of the native landscape. Based upon the recommendations of Sessions, where groundcover was needed, Parsons specified native grasses, vines, and ice plant. Parsons agreed philosophically with Olmsted Sr. regarding the incompatibility of flowerbeds and buildings in a picturesque city park and limited new buildings to the southern portion, adjacent to downtown.

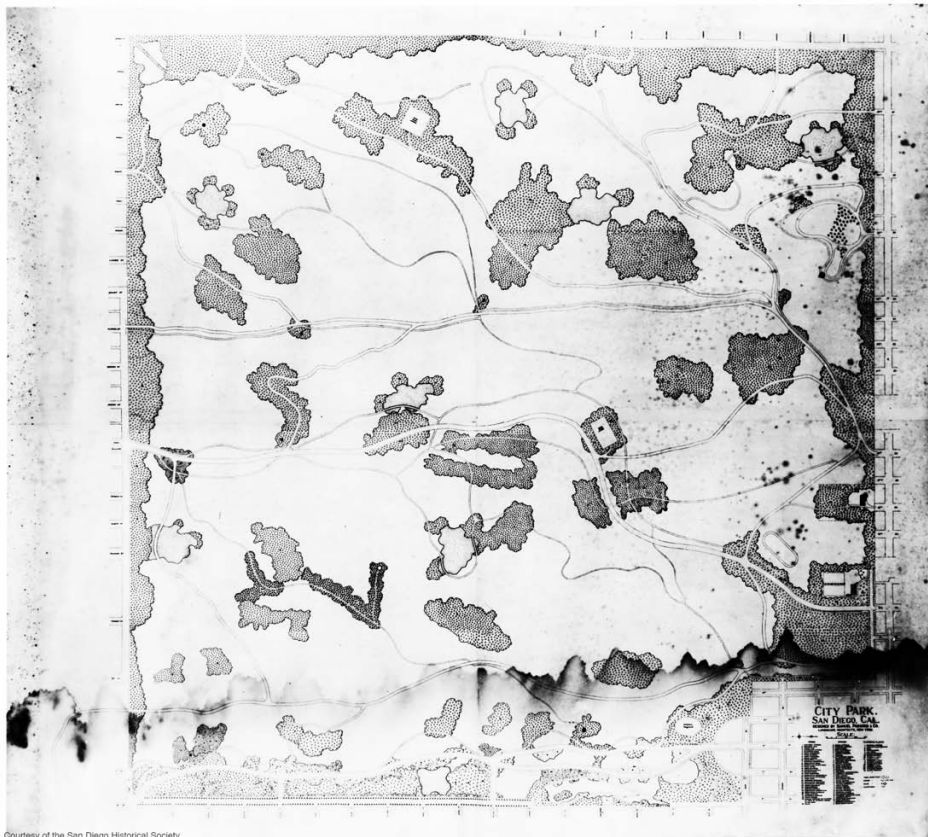


Figure 2 Samuel Parsons, City Park plan, San Diego, 1905 (San Diego History Center)

The Olmsted Brothers' Design for the Panama-California Exposition

When the Olmsted Brothers were hired for the Panama-California Exposition in October 1910, they encountered an American city seeking to develop a regionalist Hispanic expression, a desire for planning comparable to that of a great European city, and a site that had just been planned and built as a park. In April 1911 *California Garden* magazine reported that John Olmsted had said that in San Diego “he had found a combination of climate, water, soil and beautiful contour, which presents to him the best opportunity of his career.” The importance of this project to the firm was signaled by his long residency at the U.S. Grant Hotel in San Diego, including six weeks between 19 November 1910 and 4 January 1911, at a time when he was a principal of one of the busiest and largest firms in the world.

After he had only been on the job one month, John was interviewed by the *San Diego Union* regarding his design intentions. He had a remarkably comprehensive proposal, probably a result of his father’s prior work in California and frequent visits to the area.¹⁷ For the exposition design, his primary focus was on the landscape; buildings would be adapted to the site. The Olmsted Brothers respected Parsons’s desire

to preserve the park on the mesa and its existing road and path plan, and they also followed his recommendations for siting buildings in the south section of the park. All plans would focus on maintaining the large central mesa as a park after the exposition concluded. John knew that his design would influence visitors’ thinking: “Tourists and visitors to this city, during the next five years, would take the word away with them from San Diego to their homes in all portions of the country.”¹⁸ He reflected: “Personally, I have advised against the destruction of the present canyons that intersect Balboa Park, believing that the retention of these depressions will prove far more picturesque and permit of far greater nature effects, peculiar to your semi-tropical conditions, than if any wide-sweeping change were made.”¹⁹

The topography of the exposition site was rough, dotted with canyons, with a large, flat mesa to the north (Figure 3). The soil was heavy clay, requiring that holes be dynamited rather than dug in order to plant trees. Vegetation was a dense, monochromatic chaparral, showing color in late spring. It was a landscape shaped by dry conditions and the presence of salt spray, daily breezes, and summertime fog.²⁰ By 1910 a variety of past park improvements were placed on the 1400 acres, including Parsons’s road layout and plantings



Figure 3 Cabrillo Canyon, San Diego, ca. 1903 (San Diego History Center)

on the west side, groves of eucalyptus trees in the southwest corner, and plantings at two points west of Cabrillo Canyon. Kate Sessions's nursery was located in the northwest corner.²¹ John wanted to maintain the park's character, including the plantings by Parsons, pledging to protect "the existing wild shrubbery in the canyons as far as possible and adding more small flowering bushes and flowering plants in the plaza, courtyards, and other places which will come close under the eyes of visitors."²² In addition, he recommended formal gardens in "the style of gardening to be of the severest Italian or Spanish style, and not of the English style." Grass lawns, which were common elsewhere in the United States, would be severely restricted:

The English go entirely too much to lawns, and I believe that in this country you are merely trying to make water run up hill when you insist too much on lawns. The old Italian and Spanish gardens devoted their efforts more to walls and terraces, to flora, of all kinds indigenous to their climate, with walks and steps and bridges, and the effect, as a permanent feature of Balboa Park, will be far more pleasing, I believe, than if you sought the lawn effect.²³

Frederick, who remained in the Brookline office while John and Dawson worked on the West Coast, confirmed these ideas:

It seems to me that we ought to get up something very strikingly different for San Diego from all the other Expositions, based on the conditions of warm, dry climate and irrigation, cutting out lawns entirely (but using turf perhaps in decorative panels as a precious thing?) Using shallow still basins or water with aquatic plants, and perhaps with dark or colored bottoms showing through the water, Persian fashion; lots of color and foliage and flower effects in connection with simple architectural effects and lots of pools and channels of still, reflecting water surfaces with small tinkling (?) [*sic*] overflows. I mean this kind of thing in contradistinction to the effort to use water with a big

volume of flow from fountains, cascades, etc. as at most previous Expositions.²⁴

This would become the new model for landscape design in the region.

Their roads were also unlike those at their other exposition designs, for which John had laid out boulevards that extended beyond the site. In San Diego the roads that led into the center of the site would be left unpaved and drives and walks would be located "along the crests of the hills, where the landscape effect would not be injured." He planned to exclude automobiles from the natural area as much as possible in order to enhance the sense of seclusion and to redress what he saw as a social imbalance, for he feared they would be "utilized by a more favored class" and not by the general population. To serve the masses, the exposition would be connected to existing streetcar routes.²⁵

The Olmsted firm was not to be responsible for the architecture of the buildings, but they were to recommend style, general character, size, and siting. From their prior experience with exposition design, they were acutely aware of the influence of architectural character and were initially sympathetic to Mission style. John stated: "I have assured [the exposition board] that the general mission style shall be adhered to, and I have assured them that in this they have my entire sympathy. Indeed, it would hardly seem possible to adopt any other style in this portion of the country, where Spanish traditions and the early-day influences of the Franciscans have left so deep an imprint on your whole life and customs."²⁶ The envisioned architectural design would include arcades like those of the missions, "connecting building with building by one of these picturesque walls and creating the mission court effect." John defined Spanish Mission style as "very simple in outline . . . smooth plastered walls, with little or no decoration, leaving, however, opportunity for some decorative features on the gables and towers and tops of the walls."²⁷ His brother agreed that the simplicity of mission design would benefit from enriching detail, and

he suggested adding some of the churrigueresque architectural detail of the Spanish colonial:

I think it would be a good thing if you could get [Bertram] Goodhue in as architect. He is very well up on Persian and on Spanish and Mexican architecture and gardens and is very clever. Either Persian or Mexican-Spanish would work in with my notion about the garden-effects, and of course there would be a distinct appropriateness in the Mexican-Spanish stuff for San Diego, and for an exposition. The latter is because it consists of blank walls of plaster plus concentrated enrichments of applied ornament, which makes the cheapest sort of work for exposition buildings, provided only enrichment is concentrated at the right spots and is rich enough.²⁸

Bertram Goodhue (1869–1924), a partner in Cram, Goodhue and Ferguson, had published *Spanish Colonial Architecture in Mexico* in 1902, with his firm's 1905 design of Holy Trinity Church in Havana, Cuba, establishing their credentials in the churrigueresque style. Frederick was a close friend of Goodhue, and the two met in New York in December 1910 to discuss enriching the austere mission architecture that been proposed for the fair with Goodhue's Spanish colonial. Urging the award of the directing architect position to Goodhue, Frederick wrote John: "[Goodhue] is doing a Cathedral at Los Angeles and if he were called in at the San Diego Exposition he would open a California office . . . I think there is very little doubt that he is the best man for Mexican-Spanish Architecture in the country."²⁹

The Exposition Board, however, preferred Irving Gill, and they had initially considered a design competition to select the directing architect. A compromise was reached in which Gill and Goodhue would share responsibilities for the architectural design. Goodhue would make preliminary sketches for the whole group of buildings and complete drawings for one permanent building, either the art museum or auditorium; Gill was to supervise the preparation of drawings in the Director of Works office on the grounds, all the drawings for the other buildings, and especially the permanent building not chosen by Goodhue. With this change in architects, there was a change in architectural style as well, with the Olmsted Brothers firm playing a significant role in the exposition's Spanish colonial architecture by bringing in Goodhue.³⁰

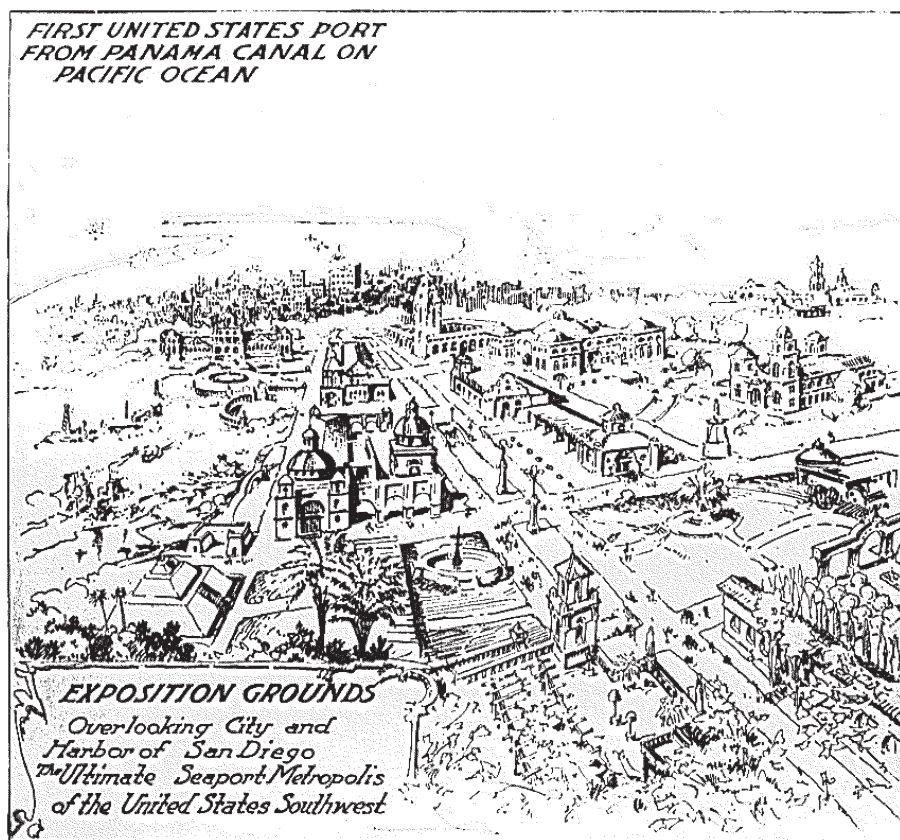
The Olmsteds' vision for the Panama-California Exposition was an eclectic Spanish design. In this, it echoed the popular literature of the time, in which the missions were regularly associated with a conflation of Romanesque, Spanish, Moorish, and Islamic styles. As early as 1893 a San Francisco *Call* reporter wrote that "Mission and Moorish" were "commonly included in the term 'Spanish.'"³¹ The interpretation

of Spanish design by the firm was a similar mix of these architectural types, blending Persian and Mexican-Spanish forms without concern for their cultural differences.³²

None of the Olmsted staff had traveled to Spain, and their understanding of Spanish architecture and city planning—and of California missions outside of San Diego—derived from current periodicals and the picture postcards of the San Fernando and San Juan Capistrano Missions that Dawson had collected.³³ His travels as an apprentice with the firm had focused on Italy and France, and when they began the design he lamented that he could not go abroad to "freshen up with details of things that might add charm and interest."³⁴ Frederick's design recommendations were drawn from photographs of Spain that he had seen.³⁵ While California had a rich visual culture by 1870, the Olmsted firm library did not contain much information on California architecture, and the landscape architectural references included only publications on the flora of the state.³⁶ With this limited knowledge of Southern California, the Olmsted Brothers cobbled together their perceptions of these Spanish typologies. For example, when John wanted to completely cover the white, austere mission buildings in vines, Frederick reposted that "completely embowered and buried in luxuriant foliage of creepers appears to me less interesting and appropriate to the circumstances and kind of architecture than the other, more suitable to rustic or Gothic work than to the Spanish."³⁷ In the same letter he asked his brother why he wanted to include a Greek theater: "Why not Spanish too in detail and treatment i.e.—a Spanish adaptation of the general plan of a Greek Theater, such as were built in Spain in Greco-Roman days?"³⁸ The correspondence suggests that Frederick though not on site during the design process, was the partner who focused his brother on Spanish design when John's creative process took him off course.

An anonymous drawing from December 1910 reveals the initial ideas for the exposition layout and its architecture (Figure 4). By January 1911 the first complete schematic plan was revealed by the Olmsted Brothers (Figure 5). Roads followed the topography, and a bridge stretched across a ravine to the exposition entrance.³⁹ The Alhambra, whose interior courtyards were lushly planted with trees for shade and wind protection, and its Generalife gardens, built on a hill with formally planted terraces, seem to have been referenced in the January design. Also like the Alhambra, to minimize runoff, John designed the trees to follow the contours of the canyon and the outer landscape was left as native vegetation and not irrigated.

One can see the influence of the Alhambra and Generalife's strong axial design. Three large plazas are organized along one axis—the Plaza Externa, Plaza Larga (the largest



*Rec'd 23 Dec '10
Probably printed in 1908 or earlier*

Figure 4 Panama-California Exposition proposal, San Diego, 1910, before Olmsted Brothers' involvement (Olmsted Associates Reels, Library of Congress)

plaza), and Plaza de Musica, which was arranged around a central fountain, and where exposition buildings flank this long spine. However, the grand Jardin Espanol is not part of this central design. Detached from the central axis, to reach it one must cross Alameda Road, turn northwest, and descend into a valley of terraced gardens. Another large garden, Jardin del Terrado, runs perpendicular to the Plaza axis and is aligned with the entry to the Agriculture and Horticulture building, wrapping around this building in response to the contours of the site. Two bridges, the Puente Espanol and Puente de Suspension, stretch across canyons to link to downtown San Diego. As in the Alameda de la Alhambra in Spain, the San Diego bridges meet in a radial focal point called El Zocalo (the gathering place). Although this layout may seem incongruous in plan, the January proposal carefully responded to the topography of the exposition site, dramatizing its peaks and valleys. Like a Mediterranean hill town, it followed the topography and was integrated into the landscape, which controlled the design.

Because of his major role of laying out the buildings, Bertram Goodhue had become the lead architect for the exposition by March 1911, and his strong influence over the

design was reflected in subsequent planning. He wrote to John: "therefore look leniently, I trust, on the liberties I have taken with certain portions of your arrangement. As a matter of fact, I think I have come at something even better now."⁴⁰ His March drawing realigned the exposition site along three axes, with the major axis on the central plaza and a monumental memorial of Balboa as the end point (Figure 6). He also established greater formality in the Foreign Government Plaza at the east side of the exposition, with a large exhibition hall anchoring one end and a balanced, complementary smaller building at the other. Goodhue focused his landscape effects in the small terraced gardens north of the Horticulture Building, aligning them with the west axis and recommending the reduction or abandonment of the elaborate Spanish Garden. He wrote to John:

I am a little afraid to speak of the water garden part of the scheme for you will be able justly to throw in my teeth the quotation about the cobbler sticking to his last. I can't help feeling, however, that the whole cañada is too irregular to permit of its being formalized without the expenditure of a [sic] awful lot of money and for myself would prefer to see the formalization kept

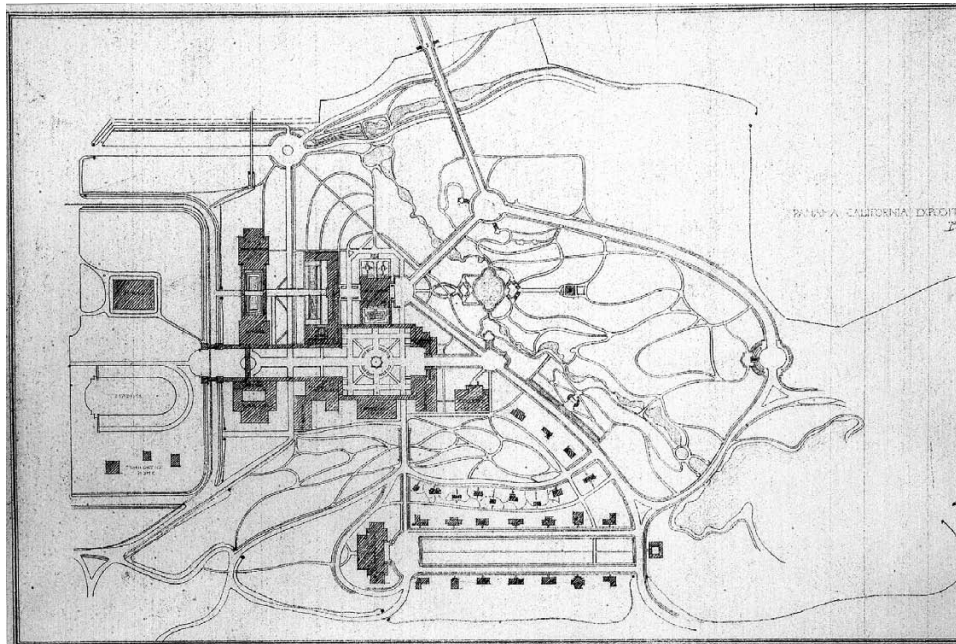


Figure 6 Bertram Goodhue, Panama-California Exposition, March 1911, modifying the Olmsted Brothers' January 1911 plan (courtesy of the National Park Service, Frederick Law Olmsted National Historic Site)

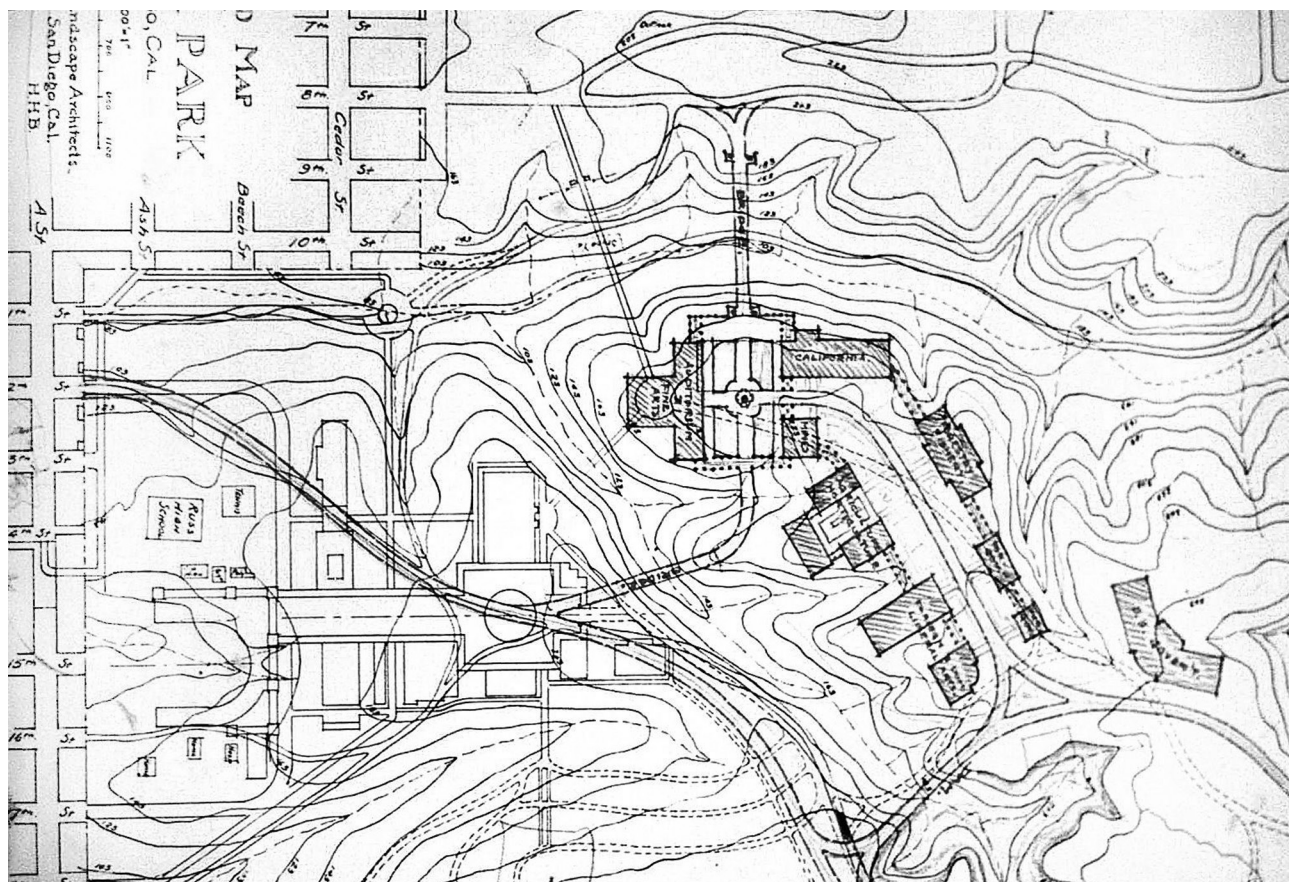


Figure 7 Olmsted Brothers, Panama-California Exposition, April 1911 (courtesy of San Diego Public Library, Special Collections)

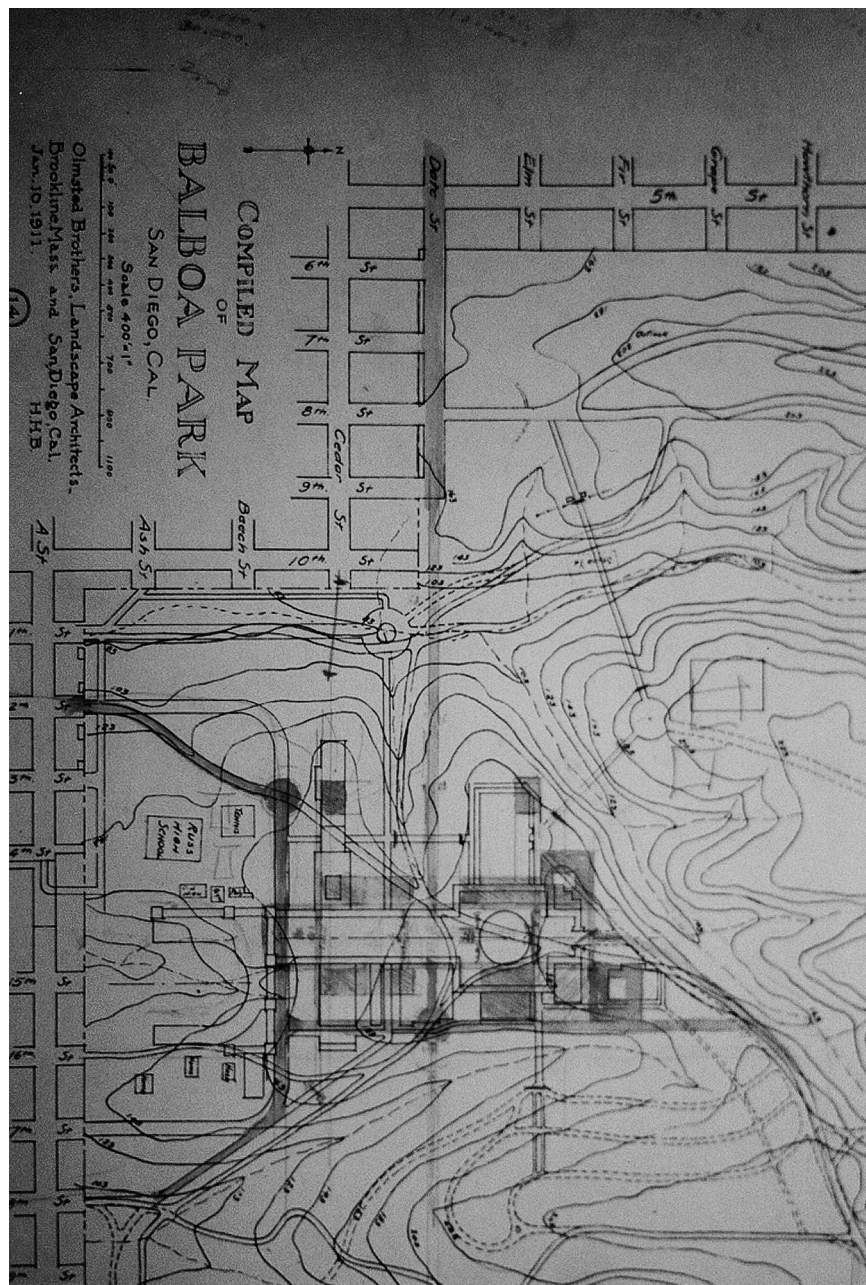


Figure 8 Olmsted Brothers, Panama-California Exposition, May 1911, adding Date Street bridge (courtesy of San Diego Public Library, Special Collections)

adapted, ecologically compatible and native plants, the constructed landscape would merge with the natural landscape. *The San Diego Evening Tribune* reported that the firm's approach called for clearing undergrowth and sparing young oaks, hardwood bushes, and native flowering plants. Once cleared, the whole tract was to be dry-farmed, deriving moisture only from fog and other natural sources.⁴⁸ Aggressively pursuing adapted plants, they would show new Californians a novel, regional approach to landscape architecture.

The Olmsted Brothers' romantic view of Spanish city planning can be seen in the Mediterranean principles of the streets and plazas. John proposed a 90-foot approach road with a 40-foot carriageway through the middle of the main plaza; the outer plaza was to serve as a turnaround for cars. The introduction of cars to what in Spain would be a pedestrian-only plaza, reflected how the Olmsted firm adapted Spanish forms to American practicality.⁴⁹ As Goodhue told John, "After all, you are dealing, not with an American town in its essence, but with what is endeavoring to be a Spanish one."⁵⁰

Through the summer the architect and landscape architects worked on separate plans, and their paths soon diverged. Goodhue argued to the exposition board that the fair should be moved to a large, flat site with sufficient room for his design. His drawings were a political argument during summer 1911, astutely presented in architectural graphics. The elder Olmsted recognized what was being done and wrote Goodhue, seemingly without rancor:

You must realize that I would not write you this long letter except from a friendly interest in you and your work and it seems to me you ought to reciprocate by making your plan for the adopted site just so complete in all details such as patios, towers, domes, terraces and so on as the other site. The difference in the two drawings was so marked that both [Frank] Allen and Gill laughed and intimated that you were resolved to show the Committee that the adopted site was a small impossible scheme to "work up" architecturally. You could certainly treat the adopted site more fairly by adding a sketch elevation or two.⁵¹

Less amicably, John wrote George Marston the next day: "I do wish you could devise some way of making Allen and Goodhue 'shut up.'"⁵² The Olmsteds had reason to believe that they would be supported by director of works Frank Allen, who had been brought to San Diego on their recommendation because of his successful installation of the Alaska-Yukon Exposition in Seattle. For political reasons, he should have supported them, and John continued in his letter to Marston:

I also suggest . . . you write to Mr. B. G. Goodhue, 170 Fifth Ave. requesting him "not to elaborate nor even present any sketch plan

already prepared, to the Committee or to the Director of Works [Frank Allen] or to any one else for the exposition on the mesa east of Laurel Street and north of the proposed emergency reservoir or for any other site other than that near the High School until requested to do so by vote of the Committee on Buildings and Grounds," nor to argue for any other site meanwhile.⁵³

This campaign apparently failed and by late summer 1911, the Olmsted Brothers' fight for the prominent role of gardens and landscape preservation had faltered and their intention that buildings should be secondary to the landscape had been subverted. John had had high aspirations for the Spanish Garden in 1910, writing to his brother, "There will be walks and stairs, terraces, balustrades, fountains, arbors, pergolas, summer houses, grottos, etc. until the money gives out!"⁵⁴ However, by August 1911, the Spanish Garden was eliminated, ostensibly due to costs, and John was left to design the canyon to be "very attractive and interesting as a garden . . . for ordinary walks and for planting" (Figure 9). Goodhue's ideas wholly changed the landscape design to be sympathetic to his buildings. He neither celebrated the site's topography nor designed a landscape suitable to the climate. He arrogantly wrote John: "Formality is the note of all Spanish garden architecture and I can't conceive, indeed, I may as well quite frankly say, I don't know in any American public park, of any effect that could compete with the bridge, the permanent buildings and the mall terminated by the Statue of Balboa."⁵⁵ Goodhue's design removed all the terrace gardens, lining the plaza with trees and creating planted courtyards, whose remains are seen today. His idea for the Spanish Garden design was a large, formal design in the manner of Vaux-le-Vicomte (Figure 10).

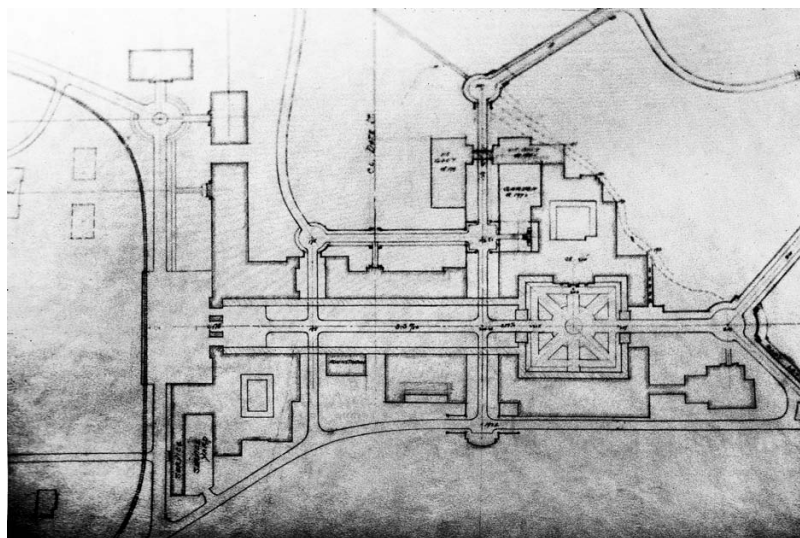


Figure 9 Olmsted Brothers, Panama-California Exposition, August 1911, showing removal of the Spanish Gardens in northeast corner (courtesy of the National Park Service, Frederick Law Olmsted National Historic Site)

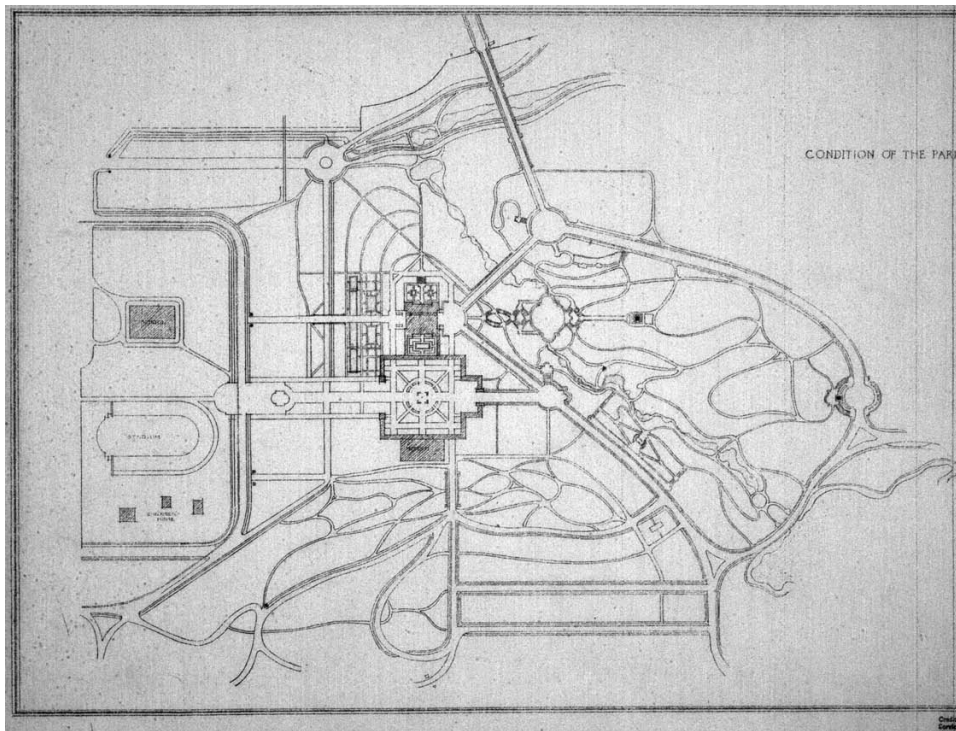


Figure 10 Goodhue, Panama-California Exposition, March 1911, with temporary buildings removed (courtesy of the National Park Service, Frederick Law Olmsted National Historic Site)

The Olmsted Brothers' effort to adapt Mediterranean design to the arid Southern California landscape had been in vain.

The Site Moves; Olmsted Brothers Resign

Goodhue continued to disagree with the Olmsted Brothers about the design, and the architect wrote to Frank Allen that "friction developed very shortly after your and my arrival in San Diego.⁵⁶ Meanwhile, others were working behind the scenes to change the site. Colonel Collier had recruited more Latin American countries to attend, which would

require additional buildings and possibly a larger piece of land. Allen also was secretly manipulating the design. He told Goodhue that the site should be changed because the adjacent high school and nearby houses were ugly. The correspondence reveals that Allen also wanted to design more of the project himself.⁵⁷ Moving the site would completely overturn the Olmsted firm's general schema and might require his design help. In this, he was supported by Goodhue, who proposed moving the entrance from Date Street north to Laurel Street, where the buildings could be laid out on an elongated piece of level ground, free of topographical restrictions (Figure 11).

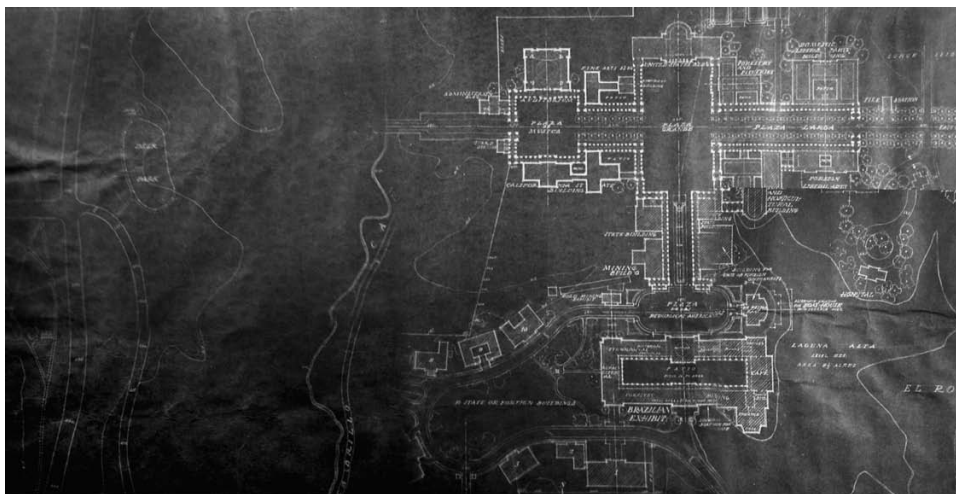


Figure 11 Goodhue, Panama-California Exposition, June 1911, Plan G, showing the Exposition moved to the top of the mesa (courtesy of the National Park Service, Frederick Law Olmsted National Historic Site)

Civic leader John Spreckles had also been working against the Olmsted design. The most wealthy and influential citizen of San Diego, Spreckles had invested in much of the town's infrastructure, including transportation. When the local cable car company went out of business in 1892, he bought it and converted to electric trolleys. He built the city dam and purchased both newspapers, thus holding a real monopoly. He had also been speculating on real estate north of the park. Foreseeing that a cable car line into the middle of the park for fair visitors could help to extend trolley service into the area north of the exposition, he withheld important financing until the fair site location was moved further north in the park.⁵⁸

John resisted moving the exposition to the mesa, pressing diligently through the summer of 1911 to find a way to keep it at the original site at the south end of Balboa Park, adjacent to the commercial district, and thus ensure that the park would be maintained after the world's fair. Commenting on Spreckles's proposals, he told Goodhue: "The idea of ruining the best part of a beautiful park by running a railway through it is simply horribly bad art, and not necessary now, nor for many years." Fearful of the site change, Fred Dawson wrote to his colleague in the Olmsted office, Harold Blossom: "If we lose out on this site proposition, I am going to urge the Olmsted's [*sic*] to pull out of the entire matter as I fear that their reputation would be injured for preparing plans providing for public buildings in a park."⁵⁹

Moving public buildings onto the mesa in the center of the park demoted the natural landscape to mere scenery and demoted the role of landscape architecture as well. Dawson sensed that Blossom was wavering in his support for the firms' position:

It sounds as if you had accepted all the pleas and arguments of Allen and various other people who have no regard for park design . . . You must realize, and, of course, Goodhue and Allen do not realize, that a park is not created to be a frame for a lot of public buildings, no matter how beautiful they might be. It is created for the purpose of giving recreation and pleasure and peace to the public who, in order to get their rest and happiness, must find a place which is quiet and peaceful and as far from the thoughts of such features of civilization as possible.⁶⁰

The Board of Commissioners was convinced to vote unanimously to move the site northward into the park, and when their president, Julius Wangenheim, telegraphed the decision to the Olmsted Brothers, they responded with their resignation on 2 September 1911. The firm wrote to Wangenheim:

We have received a telegram from our representative Mr. Blossom and from Mr. Marston, Chairman of the Buildings and Grounds Committee, stating that your Board has unanimously consented to the Exposition being located in the central part of Balboa Park. This is contrary to our advice and will interfere with various other portions of the design proposed for Balboa Park by us. We regret that our professional responsibility as park designers will not permit us to assist in ruining Balboa Park. We tender herewith, therefore, our resignation.⁶¹

The design proposed by the Olmsted Brothers had reflected their professional values as well as their personal convictions. The original site supported their ideas about city planning and connected the site to San Diego's existing infrastructure, including its transportation systems. It was closer to the business district, and its high elevation provided spectacular views of the city and harbor. The irregular topography made their picturesque design more interesting and inspired a dramatic placement of buildings. Most importantly, it maintained the open space and natural beauty of the interior of the park and supported the firm's long-term plan for a city park system. After resigning, the Olmsted Brothers firm took a week to pack and returned to Brookline, Massachusetts.

The New Site

Clarence Stein wrote an essay in 1916 that compared the San Diego world's fair, as constructed without the participation of the Olmsteds, with expositions of the past. Chicago, St. Louis, and Buffalo were glorifications of monumental city planning. San Diego, on the other hand, was the "apotheosis of all those elements of charm and variety that we associate with the cities of Italy and Spain. It has the varied symmetry and underlying order of the Latin cities without the squalor of the crowded quarters; it is the glorification of the romantic in city planning as the Gothic Cathedral was in building."⁶²

Stein recognized the wisdom of moving the exposition from its original site to the top of the mesa because the "finally adopted site was not only far ampler and far better adapted to the purpose for which it was to be used, but it permitted the entrance group with its approach over the bridge a very much more effective and architecturally important group than would ever have been possible on the original site."⁶³ From a planning perspective, Stein believed that the later site offered better opportunities for the dramatic placement of architecture and efficient function. With its focus on local architecture and history, even without the participation of Olmsted Brothers, the Panama-California Exposition was still the most regionally focused world's fair.



Figure 12 Botanical Building landscape, 1915 (San Diego History Center)

Irving Gill, originally the chief architect, resigned soon after the Olmsted Brothers.⁶⁴ Although his excuse for resigning was the acceptance of sub-par construction materials, the real reason for leaving must have been his humiliating demotion to a supervisory role, as well as the exposition's shift to Spanish colonial from his modern Mission style. Gill's sole contribution can be seen in the entrance bridge: an austere white modern structure that is differentiated from the other architecture of the fair.⁶⁵ The Spanish colonial vocabulary utilized by Goodhue provided many opportunities for sculptural ornamentation, representing California's colonial conquerors, important clergy, and civic leaders. The East Gateway offered an especially potent concentration of didactic symbolism: Junipero Serra's arrival in San Diego was represented by the coat of arms and motto of Spain, dated 1769, and the meeting of the state constitutional convention at Monterey was symbolized by the seal of the United States, dated 1846.

Few people involved in the design of the Panama-California Exposition understood the importance of how the Olmsted Brothers' proposal maintained the 1400 acres as open parkland for future generations of San Diego residents. When the architecture was changed to Spanish colonial, the

exposition's slogan was changed from the Magic Mission City to the Garden City. Paul Thieme, originally an assistant at the Olmsted Brothers firm, remained to help Frank Allen with the landscape design, and an experienced British garden designer, John Morley, was also brought to the project. Together they created a different kind of landscape than the one proposed by the Olmsted Brothers, and that was insensitive to the fact that San Diego receives only 10 to 11 inches of rain per year. Typical of their work was the landscape around the Botanical Building, a water-intensive design of large lawns and small bedding areas (Figure 12).

Ironically, both landscape design teams had envisioned a Garden City, but one was influenced by work in Michigan, Seattle, and Britain, where humidity and rain could keep grass green, and the other designed a Garden City appropriate for Southern California. The executed design proved that one could grow almost anything in California—so long as there was plenty of water. However, the appropriateness of this vision of the arid West continued to be questioned. English author A. T. Johnson noted the great disparity between which plants could grow in California (exotics) and those that should be grown (drought tolerant):

Look beyond the confines of these cities into the valleys and plains of California and you will find that they are for three seasons of the year sunburned deserts. But they respond spontaneously to the application of water. It is the liberal use of the hose pipe and the garden sprinkler which are turned on with such lavish generosity in the gardens and parks that has been the main factor in making the wilderness blossom as the rose. Indeed, the quantity of water which is used upon the ornamental gardens, not to mention the streets of Pasadena, would appear to be more than that consumed for all other purposes.⁶⁶

Throughout their engagement with the project, the Olmsted Brothers maintained that their vision of a new park typology for Southern California, which accepted the yellow native landscape as an appropriate model, would be beautiful, functional, peaceful, and ecological. After resigning in September 1911, John wrote to San Diego exposition board president Julius Wangenheim regarding what the firm had completed for the park to date. This included a general plan for a system of drives; grading plans for the northeast section of the park, the west drive, and southern site of the exposition; planting plans for various other portions of the park; and the establishment of a park nursery. Frank Allen replied to Dawson in October: "The Park Board has agreed to complete the planting of the East border in accordance with your plans, and also to do part of the planting of Palm Canyon. We have set out over three thousand palms in the Canyon and are now at work on the East Border."⁶⁷ These planted borders—including the garden called Palm Canyon—show how the Olmsted design would have showcased adapted species of palms to complement the ecology and topography of the valley.

The Olmsted Brothers firm had seen San Diego's Panama-California project as an opportunity to challenge park design and invent a new native park typology for the American West. However, they were never able to persuade the local community of the desirability of a plan that was free of East Coast and Midwestern perceptions of landscape design. The popular enthusiasm for a traditional English and eastern design was characterized by a writer for the *San Diego Union*, who described Frank Allen's design in November 1914:

What 48 months ago was a barren waste, hills of brown adobe, fields of wasted weeds, canyons of rugged ugliness, is today a veritable fairyland of blooming flowers, healthy shrubs, hospitable trees with friendly shade, great expanses of velvet lawns, in the midst of which stands a Dream City of Old Spain where, after January 1, countless thousands will roam, breathing deep

the romantic atmosphere of a long past time, created, moulded, built by a young man who has yet to greet his 38th birthday.⁶⁸

The gardens designed by Goodhue, Allen, and Morley compromised the original design intent, showing exposition visitors a simulacrum of Spanish planning conflated with the English picturesque. Southern California landscape design might have evolved differently if the San Diego Panama-California Exposition had been built on the Olmsted model.

Notes

1. John Olmsted, Panama-California Exposition, *Description of Preliminary Plan*, 26 Nov. 1910, Job #4051, Records of the Olmsted Associates, Manuscript Room, Library of Congress (hereafter O. A. Papers).
2. When John died in 1920, Frederick Jr. maintained the Olmsted Brothers' name "both for sentimental and business reasons, believing that the many changes in the name of the Olmsted office in the past were rather unfortunate" in preserving the firm's historical identity (Frederick Olmsted to Arthur C. Comey, 24 March 1920, Job #20-(3), O. A. Papers).
3. John Olmsted to F. H. Buhl, 30 Aug. 1911, Job #5386, O. A. Papers.
4. Letters between Frederick Olmsted, Jr. on the East Coast and John Olmsted on the West Coast show a clear collaboration in their designs. See one of many examples through the letters of 14 Nov. 1910 and 1 Dec. 1910 between the two brothers for the Panama-California Exposition #4051, O. A. Papers.
5. Ibid.
6. According to Dawson's obituary in *Landscape Architecture* 32, no. 1 (Oct. 1941) 1–2, the only area at the firm on which he had the least impact was in long-range municipal and regional planning.
7. D. C. Collier, *Panama-California Exposition before the Committee on Industrial Arts and Expositions* (Washington: Government Printing Office, 1911), 6.
8. Arleyn Levee, "John Charles Olmsted," in *Pioneers of American Landscape Design*, ed. Charles Birnbaum and Robin Karson (New York: McGraw-Hill, 2000), 273–76.
9. D. C. Collier, *Panama-California Exposition before the Committee on Industrial Arts and Expositions* (Washington: Government Printing Office, 1911), 7.
10. Panama-California Exposition Board Members may have decided on a mid-winter opening date copying San Francisco's California Mid-Winter Fair, 1894 which also celebrated California winter weather.
11. In his *San Diego: A Comprehensive Plan for its Improvement* (Boston: George H. Ellis, 1908) John Nolen furthered Marston's ideas of a Mediterranean identity for the city. In the master plan he compared the current plaza at Fourth and D Streets with the Plaza in Madrid, Spain for future design, adding the plaza, City Hall, the Court House, and Federal Building should be arranged in "Spanish fashion" (24). The photographs used throughout Nolen's book reference Spain, Rio de Janeiro, the Paseo in Kansas City, Missouri, Buenos Aires, and São Paulo with features in Hispanic design that could provide models for San Diego.
12. Percival Gallagher to George Marston, 4 June 1907, Reel #193, Job #3370, O. A. Papers.
13. John Nolen understood the importance of maintaining 1400 acres for a large park for San Diego in his improvement plan: "The people of San

Diego would do well if they recognize today the two great central recreation features of the city . . . are the City Park of 1400 acres and the bay front, and that the value of both will be increased many fold if a suitable connecting link, parkway or boulevard, can be developed, bringing them into direct and pleasant relation. Here, on the hillside, at comparatively small expense, can be developed what I have called, after the custom in Spanish and Spanish-American cities, 'The Paseo,' a pleasant promenade, an airing place, a formal and dignified design." Showley, *Balboa Park*, 27. Additionally, the City Park plan came about through Kate Sessions's 1902 request for landscape architect recommendations. John McLaren, Superintendent of Golden Gate Park, suggested the Olmsted Brothers, Warren H. Manning, or Samuel Parsons, Jr. According to Richard Amero, "Samuel Parsons Finds Xanadu in San Diego," *Journal of San Diego History* 44, no. 1 (Winter 1998), 2, McLaren drew a plan for curvilinear roads on the west side of the park to start the project. See also Florence Christman, *The Romance of Balboa Park*, 26.

13. Showing the interrelationships within American landscape architecture at the turn of the century, Amero argues that while Parsons idolized Olmsted Sr. he was less charitable toward Frederick Jr., who had received considerable praise for his contribution to the 1901 McMillan Commission Plan in Washington, D.C. for which the U.S. Senate had initially chosen Parsons.

14. Though a design disciple of Olmsted Sr., Parsons's incorporation of outside views for a city park setting was a reversal of Olmsted Sr.'s attempts to enclose Central Park from the city with trees that would naturalistically shield the surrounding brownstones from views from within the park.

15. Richard Amero, "Samuel Parsons Finds Xanadu in San Diego," *Journal of San Diego History* 44, no. 1 (Winter 1998), 5.

16. Christman, *The Romance of Balboa Park*, 29.

17. The Olmsted Brothers' first design for Southern California was at the invitation of the Banning Brothers of the Santa Catalina Island Company, who were establishing a resort at the city of Avalon on Santa Catalina Island, west of Long Beach. In 1903 that firm solicited Frederick Law Olmsted, Sr. for a plan for the complete improvement of the landscape and roads. In April John, working on projects in the Northwest, made a three-day inspection of the topography, flora and fauna, width and grade of roads, and valley and coastline views. John's forty-page proposal revealed a detailed recollection of views and siting, existing conditions, and city planning. While it used water-conserving natural vegetation and used saltwater for pools, toilets and fountains (recalling previous solutions in Jamaica), it was more a reworking of the firm's past successes than truly responsive to the region and the architecture itself. John Olmsted to Messrs. Banning Co., 1 June 1903, Reel #91, Job #2394, O. A. Papers.

18. "Olmsted Outlines Plan for Park Improvement," *The San Diego Union*, 11 Nov. 1910, sect. 2, p. 16.

19. Ibid.

20. Gregory E. Montes, "San Diego's City Park, 1868–1902: An Early Debate on Environment and Profit," *The Journal of San Diego History* 23, no. 2 (Spring 1977), 5. Montes cites George W. Marston, "History of San Diego City Parks" (San Diego: privately printed, 1936), 5. The Marston pamphlet text is contained in Carl: Heilbron, ed., *History of San Diego County* (San Diego: The San Diego Press Club, 1936), 153–64. Much of the Marston parks pamphlets are condensed in: H. K. Raymenton, "California Athens" (San Diego undated typescript; n.d.), in "San Diego's Parks" Folder, G. W. Marston Collection, SDHS. Horn, Part 1, 10.

21. Christman, *The Romance of Balboa Park*, 29–30.

22. John Olmsted, "Panama-California Exposition Description of Preliminary Plan," 16 Nov. 1910, Reel #239, Job #4051, O. A. Papers.

23. "Olmsted Outlines Plan for Park Improvement," *San Diego Union*, 11 Nov. 1910, sect. 2, p. 16.

24. Frederick Olmsted Jr. to John Olmsted, 14 Nov. 1910, Job #4051, O. A. Papers.

25. See John Olmsted's interview in *San Diego Union*, 11 Nov. 1910.

26. Ibid.

27. John Olmsted, "Panama-California Exposition Description of Preliminary Plan," 26 Nov. 1910, Job #4051, O. A. Papers.

28. Frederick Olmsted Jr. to John Olmsted, 14 Nov. 2010, Job #4051, O. A. Papers.

29. Ibid.

30. See John Olmsted to Boston architect Howard Walker, 2 Feb. 1911, Job #4051, O. A. Papers.

31. Karen Weitze, *California's Mission Revival* (Los Angeles: Hennessey & Ingalls, 1984), 52.

32. See Frederick Olmsted, Jr., to John Olmsted, 14 Nov. 1910, Job #4051, O. A. Papers.

33. According to the Olmsted firm records from their Brookline library, they subscribed to *The Architectural Record* beginning in 1907, although earlier issues could have been available to them. Before 1911 there were several articles on Spanish architecture with graphic examples that would have served as models for the Panama-California Exposition: see Charles A. Rich, "Architecture in Spain," *Architectural Record* 4 (1894), 14–35 for the photo and materials of a Spanish bridge; Charles A. Rich, "Architecture in Spain," 5 (1895), 48–64 for gardens and site plans of Spanish cathedrals; Charles A. Rich, "Architecture in Spain," 5 (1896), 227–43 for gardens, site plans, and architectural style; Olaf Z. Cervin, "The Spanish-Mexican Missions of the United States," 14 (1903), 181–204 for drawings and photographs of missions from California, Texas, Mexico and Spain; architectural details; and adjacent landscaping; Katherine C. Budd, "Sargossa," 19, no. 5 (1906), 327–43 for description of materials and detailed architectural drawings; and Arthur G. Byne, "Andalusian Gardens," 29, no. 5 (1911), 370–77 for gardens, walls, and vistas. Also available were articles from other periodicals including: Clinton G. Harris, "The Gardens of Aranjuez," *House and Garden* 2 (1902), 519–1; Georges Riat, "Jardins d'Espagne," *Art et decoration* 16 (1904), 95–100; K. L. Bates, "Gardens of the Alcazar at Seville," *House and Garden* 6 (1904), 1–11; and Calvin Kiessling, "Glimpses of Spanish Gardens," *Architectural Review* 14 (1907), 185–89. One also cannot underestimate the romantic descriptions and sketches of Spain by Washington Irving from his journals in 1828. His notes on Moorish legend and history would have been readily available, and clearly describe topography, vegetation, building siting, and Spanish culture.

34. James Frederick Dawson to John Olmsted, 19 Nov. 1910, Job #4051, O. A. Papers.

35. Frederick Olmsted Jr. to John Olmsted, 1 Dec. 1910, Job #4051, O. A. Papers. Frederick wrote his brother, "If the ravine is narrow enough to permit a Spanish bridge like some of those exceedingly interesting and characteristic old viaducts and bridges in Spain of which I have seen photographs it would be great."

36. According to Anthony Reed, archivist at the Frederick Law Olmsted National Historic Site, a review of the Olmsted library included only the following books and references before the firm's resignation in 1911. The Planting Department kept a set of brochure/pamphlet index cards (to the same collection) with cards for "California—Flora," "California Trees," "California" (*Home & Garden* 10, no. 4 [1906]), and "California, Native Shrubs." This list is exclusive of the periodicals received by the firm (see note 33). In the historic library germane specifically to Spanish/Mexican architecture, but purchased after 1911: Mildred Stapley Byne and Arthur Byne, *Spanish Gardens and Patios* (Philadelphia, London: Lippincott, 1924); Kurt Hiescher, *Picturesque Spain Architecture, Landscape, Life of the People* (New York: Brentano, 1922); The Minor Ecclesiastical, Domestic, and Garden

Architecture of Southern Spain, photographs and drawings by Austin Whitlesey, preface Bertram Grosvenor Goodhue (New York: Architectural Book Publishing Co., 1917); Louis La Beume and William Booth Papin, *The Picturesque Architecture of Mexico* (New York: Architectural Book Publishing Co., 1915); Mildred Stapley Byne and Arthur Byne, *Spanish Ironwork* (New York: Hispanic Society of America, 1915). There is nothing on the native or vernacular California architecture or landscape.

37. Frederick Olmsted Jr. to John Olmsted, 1 Dec. 1910, Job #4051, O. A. Papers.

38. Ibid.

39. C. M. Villiers-Stuart in *Spanish Gardens: Their History, Types and Features* (London: B. T. Batsford, 1929), 26, described how the former approach to the Generalife was from below, where a bridge spanned a ravine dividing it from the citadel. It was replaced by an avenue of cypresses that lead out to the road higher up the valley, but following the customary Moorish plan, the actual garden was still entered through the main building.

40. Bertram Goodhue to John Olmsted, 20 March 1911, Job #4051, O. A. Papers.

41. Ibid.

42. John Olmsted to Bertram Goodhue, 17 May 1911, Job #4051, O. A. Papers.

43. Ibid. The bridge was ultimately built at Laurel Street.

44. Ibid.

45. Ibid.

46. San Diego Floral Association, *The California Garden* 2, no. 10 (April 1911), 11.

47. Blossom went on to design the planting plan for Riverside, California's Fairmount Park while working for the Olmsted firm in August 1911, as a possible preliminary design for Balboa Park.

48. "Model Nursery is Thriving in Park," *San Diego Evening Tribune*, 23 Feb. 1911, 3.

49. Dora Crouch with Daniel J. Garr and Axel I. Mundigo, *Spanish City Planning in North America* (Cambridge: MIT Press, 1982), 172.

50. Bertram Goodhue to John Olmsted, 26 May 1911, Job #4051, O. A. Papers.

51. John Olmsted to Bertram Goodhue, 2 June 1911, Job #4051, O. A. Papers.

52. John Olmsted to George Marston, 3 June 1911, Job #4051, O. A. Papers.

53. Ibid.

54. John Olmsted to Frederick Olmsted Jr., 24 Nov. 1910, Job #4051, O. A. Papers.

55. Bertram Goodhue to John Olmsted, 26 May 1911, Job #4051, O. A. Papers.

56. Bertram Goodhue to Frank Allen, 14 April 1915, Job #4051, O. A. Papers.

57. See Harold Blossom's letters to John Olmsted, 29 Aug. 1911, 6 Sept. 1911, 8 Sept. 1911, Job #4051, O. A. Papers, supporting the argument that Allen wanted to design the project himself, hoping to hire Blossom and Dawson from the Olmsted Brothers to help him.

58. See also Gregory Montes, "Balboa Park, 1909–1911: The Rise and Fall of the Olmsted Plan" *Journal of San Diego History* 28, no. 1 (Winter 1982): 46–67 for Spreckles's manipulation of the Panama-California Exposition site.

59. James Frederick Dawson to Harold Blossom, 23 June 1911, Job #4051, O. A. Papers.

60. James Frederick Dawson to Harold Blossom, 14 June 1911, Job #4051, O. A. Papers.

61. Western Union Telegram, Olmsted Brothers to Julius Wangenheim, 2 Sept. 1911, Job #4051, O. A. Papers.

62. Clarence Stein, "A Triumph of the Spanish Colonial Style," in *The Architecture and the Gardens of the San Diego Exposition*, ed. Carleton Monroe Winslow (San Francisco: Paul Elder and Company, 1916), 11.

63. Ibid., 16.

64. Gill was associated again with the Olmsted Brothers in 1911 for the design and construction of Torrance, California, an ideal industrial town that allowed Gill not only to use his modern architecture but test his ideas for innovative workers' housing.

65. Tom Hines in *Irving Gill and the Architecture of Reform: A Study in Modernist Architectural Culture* (New York: Monacelli Press, 2002) argued that the bridge for the Panama-California Exposition so closely resembles the bridge Gill designed for Torrance in 1913, that it must be Gill's design. However, in a letter from Goodhue to Frank Allen, Goodhue argued over the credit for the bridge's design: "The fact that in the article your name appears as designer of the bridge is not because it is notoriously not my work; but because two designs had been prepared for it, one by me in the natural course of my duties and assisted by Mr. Meuser, the engineer of the Galveston Sew-wall [sic] and the other by you or by Mr. Hunter under your direction." 14 April. 1915, Job #4051, O. A. Papers.

66. A. T. Johnson, *California: An Englishman's Impression of the Golden State* (London: Stanley Paul and Co., 1913), 26–27, cited in David Streatfield, *California Gardens: Creating a New Eden* (New York: Abbeville Press, 1994), 63.

67. Frank Allen to James Frederick Dawson, 16 Oct. 1911, Job #4051, O. A. Papers.

68. W. C. Getty, "Exposition Tribute to Master Builder," *San Diego Union*, 29 Nov. 1914, sect. 1, p. 8.